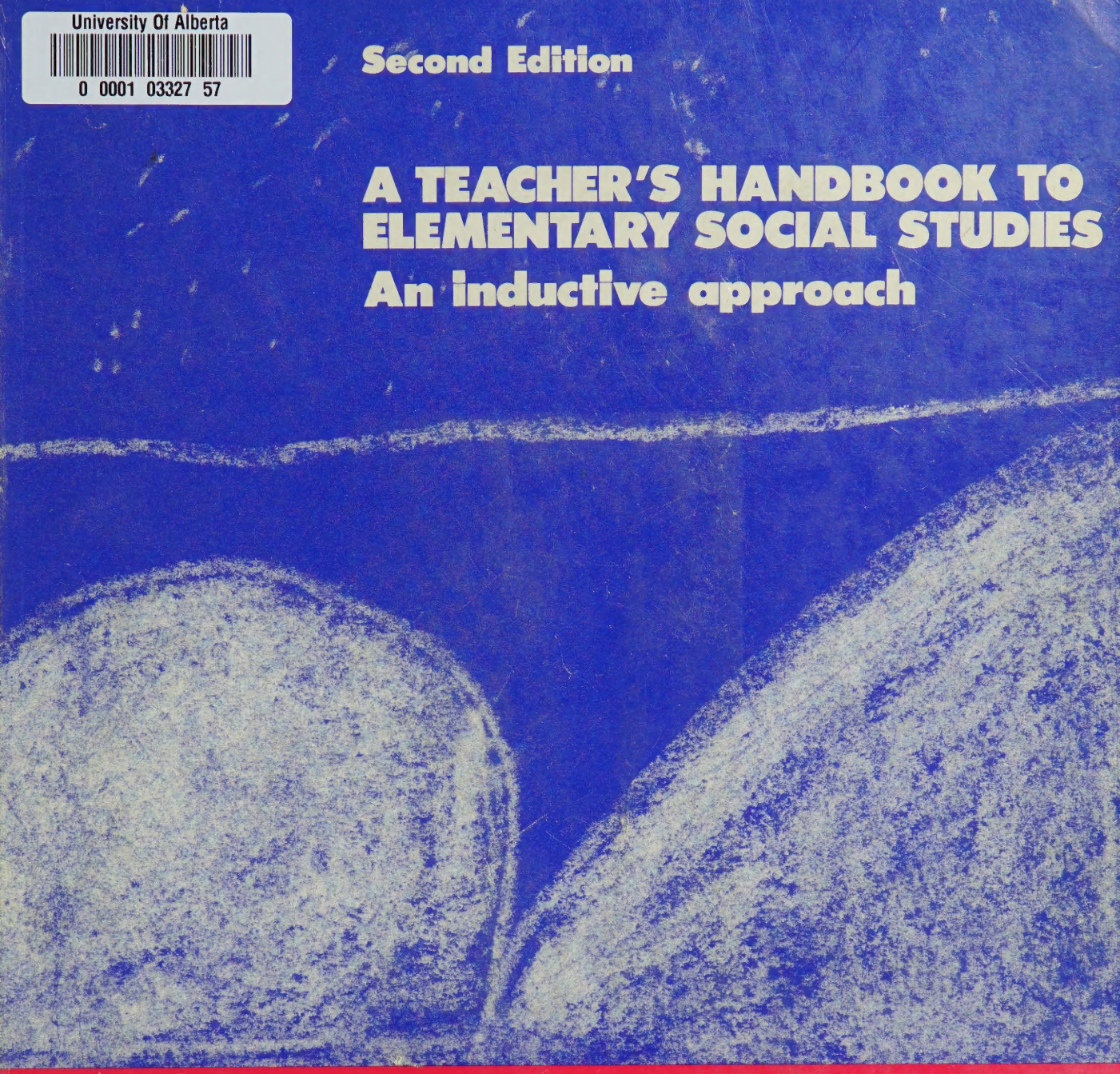
University Of Alberta
0 0001 03327 57

Second Edition

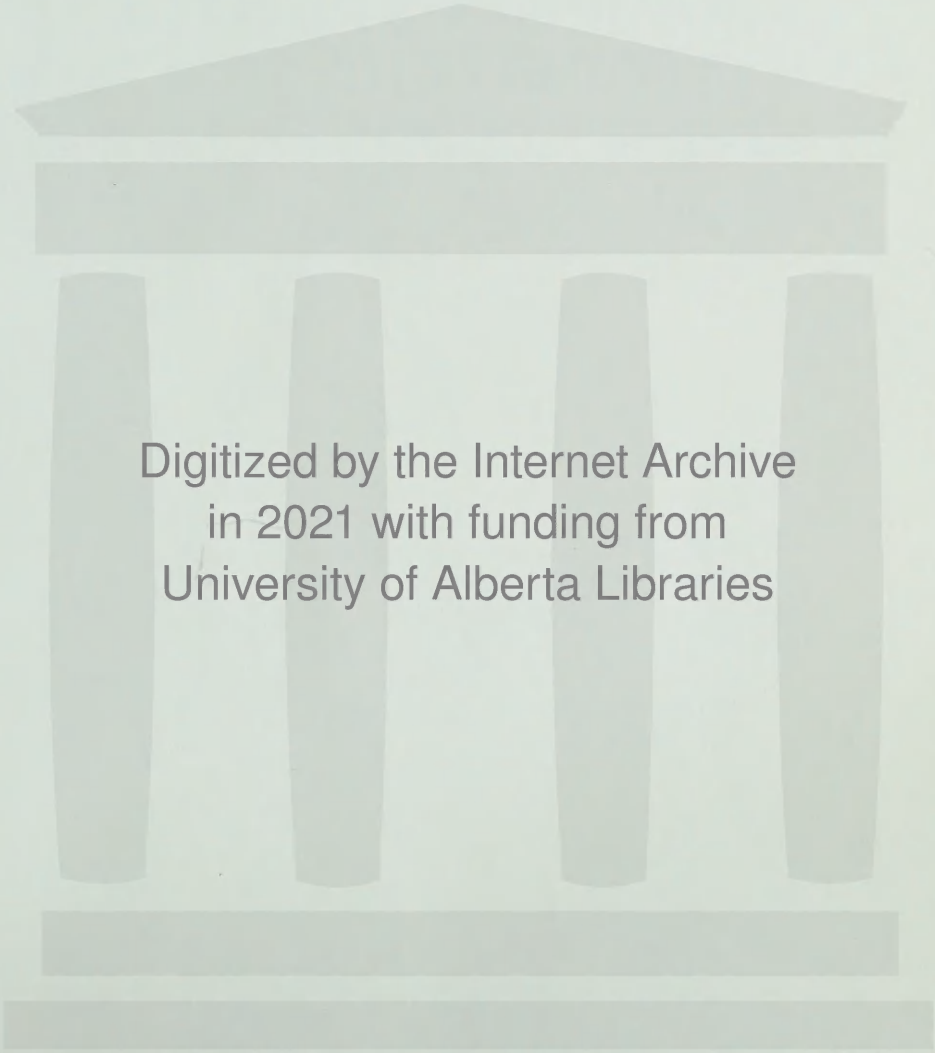
A TEACHER'S HANDBOOK TO ELEMENTARY SOCIAL STUDIES

An inductive approach



Taba • Durkin • Fraenkel • McNaughton

Ex libris
universitatis
albertaensis



Digitized by the Internet Archive
in 2021 with funding from
University of Alberta Libraries

https://archive.org/details/teachershandbook00taba

SECOND EDITION

A TEACHER'S HANDBOOK TO ELEMENTARY SOCIAL STUDIES

An Inductive Approach

HILDA TABA (deceased)
MARY C. DURKIN
JACK R. FRAENKEL
San Francisco State College
ANTHONY H. McNAUGHTON
University of Auckland

ADDISON-WESLEY PUBLISHING COMPANY
Reading, Massachusetts · Menlo Park, California · London · Don Mills, Ontario

Copyright © 1971 by Addison-Wesley Publishing Company, Inc.
Philippines copyright 1971 by Addison-Wesley Publishing Company, Inc.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the publisher. Printed in the United States of America. Published simultaneously in Canada. Library of Congress Catalog Card No. 78-147815.

LIBRARY
UNIVERSITY OF ALBERTA

FOREWORD

This revised edition of the Handbook describes a rationale for a new approach to the social studies curriculum, the teaching strategies and procedures this type of curriculum requires, and the means by which results may be evaluated.

The curriculum ideas to be discussed in this book were first developed in the Contra Costa County Schools in California. The total program was formulated in the light of a careful analysis of problems of curriculum construction over a ten-year period of development and local trial. The curriculum model was then revised at San Francisco State College under a grant from the United States Office of Education. Ten school districts participated in the revision of the curriculum.

This particular revision has been done by three associates of Dr. Hilda Taba who worked closely with her at San Francisco State College and who were members of the Taba Curriculum Development Project until its completion in 1969.

Originally, those involved in developing this curriculum design struggled with the conflict between the coverage, or the broadening scope, in the social studies curriculum and the demands for greater depth. From this struggle came the theoretical foundation for the new approach to curriculum development. First, it became clear that the subject matter had to be seen as consisting of three levels of knowledge, each of which served a special function in curriculum organization and learning:

1. the key concepts that serve as threads weaving through many grade levels;

2219445

2. the significant ideas that serve as focal points for the selection and organization of the content and represent the fundamental learnings; and
3. the specific facts and cases that serve as samples through the analysis of which students could arrive at the important ideas.

Second, it became evident that specific plans were needed for selecting and organizing the learning activities through which students could achieve several different objectives, such as discovering important ideas and developing attitudes. The achievement of these objectives required the student to master relevant social and academic skills.

Finally, it was necessary to give some attention to the kind of teaching strategies and procedures required by a successful pursuit of these objectives, such as helping students move through "bite-size" steps to the basic ideas and aiding them in sequential development of the necessary intellectual skills.

In a sense these three aspects of curriculum—content, learning activities, and teaching strategies—represent a system of thinking about and planning of curriculum. If teachers are to use such a curriculum intelligently, they need to understand the theoretical basis for this system as well as to master the special teaching skills for implementing it. For this reason, this book dwells at some length on such elements of curriculum development as:

- the range of objectives to which this curriculum is addressed;
- how the content is selected and organized;
- how the learning experiences are selected and organized;

- how teaching strategies and procedures implement the objectives; and
- what techniques may be used as a yardstick to evaluate the feedback.

This book also contains certain practical examples of teaching strategies, such as how to move toward basic ideas through bite-size steps, how to assure a sequential growth in making inferences, and how to ask open-ended questions.

The first two chapters of this publication develop the theoretical setting for the curriculum design, including the pattern of multiple objectives. Chapter 3 describes the selection and organization of content. Chapter 4 describes the selection and organization of learning activities and introduces the model curriculum guides.

Chapters 5–8 describe important teaching strategies and procedures which are necessary to implement and evaluate the curriculum. The description of teaching strategies for the development of cognitive skills and attitudes, feelings, and values is of special importance because the success of the curriculum in advancing these skills rests on the quality of the teaching strategies employed.

The changes made in this revised edition of the *Handbook* reflect some of the changes which took place during the latter half of the second research project. There are some modifications to the meanings given to some of the terms, and more detailed and precise explanations are provided for most of them.

There are important additions to the section on teaching strategies including ones dealing with feelings, attitudes, and values. Two new

chapters cover the role of questioning and evaluation of student progress toward objectives.

The theories and ideas on which this curriculum was based came from several sources. The basic theory of curriculum development is described in the book, *Curriculum Development: Theory and Practice.*[1] The chief sources for ideas and techniques concerning the learning processes and the development of cognitive skills were two research projects financed by the United States Office of Education: *Thinking in Elementary School Children* (Cooperative Research Bureau Project Number 1574) and *Teaching Strategies and Cognitive Functioning in Elementary School Children* (Cooperative Research Bureau, Project Number 2404). Finally, most ideas for the learning activities were originated by teachers (initially in Contra Costa County Schools and, later, in the Berkeley Unified School System, Kern County, and Los Altos, California). Under the guidance of the county curriculum staff and the Curriculum Project staff, these teachers developed and tested the appropriate learning sequences.

Appreciation is due to many teachers and administrators: those who assisted in the development and tryout of materials and those who participated in the research projects mentioned above. Special thanks is extended to Alice Duvall, who provided leadership training experiences and contributed to the development of materials for this publication. Appreciation is extended to the New World Foundation for the grant that made the initial draft of this publication possible.

---

[1] Hilda Taba, *Curriculum Development: Theory and Practice.* New York: Harcourt, Brace, and World, 1962.

This publication will be useful to teachers who are using the curriculum guides developed by the Curriculum Project, to school administrators and college instructors who are interested in curriculum structures and in learning and teaching strategies, and to persons interested in the ways of developing cognitive processes. The theoretical ideas pertaining to the development of these processes have relevance for the study of subjects other than the social studies.

Hilda Taba (deceased)
M. C. D.
J. R. F.
A. H. McN.

San Francisco
March, 1971

CONTENTS

Chapter 1 Curriculum Development in a Changing World 1

Chapter 2 Educational Objectives and Their Nature 8

Educational Objectives 8
Thinking 10
Knowledge 11
Attitudes, feelings, and values 13
Academic and social skills 14
Implementation of Multiple Objectives 14
Instructional objectives 16
Summary 18

Chapter 3 Selection and Organization of Content 19

Content Structure—A Basis for Organization 19
Key concepts 19
Main and organizing ideas 27
Specific facts 30
Patterns for Content Organization 32
Summary 33

Chapter 4 Selection and Organization of Learning Activities 38

Criteria for Productive Learning 38
Characteristics of Learning Activities 41
The Teaching Guide 46
Provisions for content 47

A summary statement: The relationship of learning activities to content 52
Gross sequence of learning activities 53
Internal sequence 54
Internal rotations 54
Summary 55

Chapter 5 Teaching Strategies and Procedures 64

Introduction 64
Major Strategies 65
Developing concepts 65
Attaining concepts 70
Developing generalizations 72
Generalizing about attitudes, values, and feelings 76
Applying generalizations 83
Minor Strategies 87
1. Repeating responses 89
2. Rephrasing responses 90
3. Asking for explanations of predictions 90
4. Asking for explanations of high-level responses 90
Procedures 91
Translating content into learnable tasks 91
Comparing and contrasting 93
Discussion procedures 98
Formulating hypotheses 100
Summary 102
References 103

Chapter 6 The Key Role of Questioning 104

The Role of the Questioner 104
The Opening Question 105
Lifting Questions 107
Supporting Questions and Roles 113
Self-Evaluation by Students 117
Are my thoughts well-organized? 117
Are my thoughts on focus? 119
Is my thinking appropriate to the task? 119
Are my thoughts precise? 120
Do I consider all the possibilities in my thinking? 121
Do I use other information I already have? 122
Do I evaluate my own thinking? 122
Summary 123

Chapter 7 The Development of Skills 124

Principles of Skill Development 125
Types of Skills 127
The Development and Use of Skills 128
Academic skills 128
Social skills 131
The sequential development of skills 132
Organizing the Class 135
Summary 137

Chapter 8 Evaluating Student Progress 139

Grouping Responses and Recording Results 139
Evaluation of Concept Development Exercises 141

Rationale 141
Examples 143
Evaluation of Generalizing Exercises 144
Rationale 144
Examples 146
Evaluation of Application of Generalizations Exercises .. 147
Rationale and examples 147
Evaluation of Exercises on Attitudes, Feelings, and Values .. 149
Evaluation of Exercises in Social and Academic Skills 151
Summary 154

Appendix Main and Organizing Ideas for Grades 1 through 8 .. 155

CURRICULUM DEVELOPMENT IN A CHANGING WORLD

Chapter 1

A massive revision of curriculum is today occurring in all subject areas. Overall goals and directions, teaching and learning processes, teacher style, kinds and types of learning, the organization and structure of knowledge, learning activities, and the measurement and evaluation of teaching and learning are being re-examined. A host of new developments in materials, equipment, and methodology have emerged, and are continuing to appear.

This revision is well under way in the social studies. A serious attempt is being made in many quarters to state broad societal and personal goals in terms of expected student behaviors. A new perspective is appearing on the nature of content to be used, with emphasis being placed on those elements of content believed most durable (such as concepts and generalizations) rather than on the acquisition of essentially factual information alone. A major emphasis has been placed on identifying basic concepts, principles, and methods of investigation in history and the social sciences, and then using these elements as a basis around which to organize the curriculum. More and more we see an emphasis upon an in-depth study of fewer topics and a reduction of the superficial "coverage" aimed for in the past.

Student learning is also being reconsidered. Various types of learning and significant elements involved in the learning process are undergoing scrutiny. Emphasis is shifting from learning as acquisition to learning as utilization; from learning as a process of absorption of givens (from textbook and teacher) to learning as a process of discovering important relationships and principles inductively; to learning as a way of inquiring and thinking according to the procedures of the social sciences.

Most noticeable among the many innovative ideas that have emerged has been the renewed emphasis upon the development of cognitive skills. New social studies curricula show a growing concern for developing such skills as conceptualizing, generalizing, hypothesizing, and applying previously learned generalizations in new situations, and the techniques of independent inquiry. Of major significance has been a concern for developing individuals capable and desirous of autonomous learning—of continuing to learn long after their "formal" education has ended.

A new and maturing view of individual differences is also appearing. Fresh attempts are being made to organize curricula in order to provide for the needs of all students, irrespective of their ability and background, and to avoid the all too common approaches which have started by prematurely labeling students as bright and not-so-bright and ended in creating the very kind of person we prematurely labeled. Though the idea of individualization of learning is not new, new research on learning and the opportunities opened up by sophisticated technological advances offer numerous possibilities for practical implementation. In the past, differences in ability levels were usually dealt with by one of two means: either varying the pace of learning while going over the same content and using the same materials and methodology, or by grouping students homogeneously according to ability (e.g., special classes for the "gifted" or the "slow" learner) and providing them with different curricula. Many curriculum developers today, however, are attempting to individualize learning within heterogeneous classes through the use of approaches such as programed learning, simulation games, and technological aids such as computerized instruction. More significant, however, are efforts to develop different kinds of materials and learning activities in order to assist students to reach what are essentially similar goals, and curricula which encourage teachers to adapt questions and materials to whatever pace and style may suit a particular individual at a given time.

New teaching strategies are also in the wind. The expository style of teaching, so prevalent in the past, though still useful for particular purposes and in particular situations, is being supplemented and even replaced by inductive methods and techniques. Yet more important, particular teaching strategies designed for specific ends are being differentiated. Less and less reliance is being placed on vague notions of what are reputed to be "good" methods and procedures, as more research evidence accumulates to support the inclusion of detailed steps in curriculum guides.[1]

---

[1] See Norman E. Wallen, Mary C. Durkin, Jack R. Fraenkel, Anthony H. McNaughton, Enoch I. Sawin, *Development of a Comprehensive Curriculum Model for Social Studies for Grades One through Eight, Inclusive of Procedures for Implementation and Dissemination.* Final Report, Project No. 5–1314, Washington, D.C., U.S. Office of Education, October, 1969.

Of particular interest is an increased emphasis on value analysis and development. Long neglected, the affective domain seems to be one of the major areas for curriculum reconsideration and innovation. Teaching strategies and learning activities designed to help students explore feelings, to develop their own values, to understand and analyze the values which they and others hold, and to remain amenable to change on the basis of rational thought are emerging with increasing frequency, though they are as yet still comparatively few in number.

It must be pointed out, however, that many of the curricula which are based on the innovations suggested above are by no means widely accepted. Many are as yet still untested on a nationwide scale. Many have been tried out with a restricted range of students, and thus may be unsuitable for others. Many are resisted by what appears to be a built-in conservatism that exists within many schools and among many educators and lay groups. Many (particularly in the areas of subject matter) have essentially narrow concerns and foci, having been constructed by specialists more intent on proselytizing new developments in their own field than with the total curriculum in a school program. Most are built on somewhat different assumptions about learning, content organization, and central purpose so that any attempts to combine them into a total program for any given school may subject students to inconsistent or conflicting patterns of learning, which may or may not be beneficial. Relatively few have appropriate teaching guides, and fewer still have produced guidelines for in-service training of teachers in the field. How various districts throughout the nation are to identify and select intelligently those programs most appropriate for their particular needs remains at present an unresolved question.

Certainly the innovations listed above are long overdue in the social studies. Critics have long pointed out that the traditional social studies curriculum is obsolescent. It has disregarded the non-western world; rarely provided opportunities for cross-cultural comparisons of any kind; ignored for the most part the techniques and premises of the behavioral sciences; overemphasized factual content and failed to deal significantly and systematically with ideas; contributed relatively little to students' cognitive development; ignored (almost entirely) the role of values and feelings in shaping behavior; and failed to provide for cumulative learning. These criticisms point up a number of problems to which curriculum developers in the social studies must address themselves. To mention but a few:

1. *The explosion of knowledge.* It has been said that in today's world more knowledge is discovered every *day* than the sum total of information which existed prior to 1900! More and more data are added to the curriculum every year. Since the curriculum is already overcrowded,

any attempt to "cover" an increasing range of content creates a severe problem. The essential question is one of selection—but how do we select?

2. *The obsolescence of knowledge.* Knowledge becomes outdated quickly. Much of the content covered in school courses, such as details of political boundaries or population statistics, changes constantly, and this means that much of the factual detail that a fifth grader learns will be out of date before he has graduated from high school. The central question here concerns the kinds of knowledge which are most durable and valuable for students to acquire.
3. *The variety of knowledge.* It can be argued that students need data from a wide range of social sciences. If they are to acquire sufficient knowledge and skills to understand themselves and to live effectively in today's complex world, they must be introduced to concepts and ideas from not only history and geography, but also political science, economics, psychology, sociology, anthropology, law, education, and philosophy. Here the question revolves around how the key ideas and concepts of these disciplines can be identified, and then acquired and utilized most effectively by students.
4. *The range of student abilities and sophistication which exists within any classroom.* In many ways today's students are far more knowledgeable and capable than many assume. At the same time, however, because a larger proportion of students today remain in school, there are many students in, for example, the ninth grade whose measured ability equals that of an average second grader. This problem of heterogeneity suggests a need for procedures which can assist students of widely varying abilities to achieve somewhat similar goals.
5. *Cognitive development.* Recent studies of learning have led to a greater emphasis being placed on creativity, on autonomy of thinking, and on methods of inquiry. Students do need to learn how to make effective use of the data which they acquire. Thinking skills such as the ability to conceptualize and to make warranted inferences from data are therefore becoming more and more essential for survival. Thus teaching strategies and learning activities to promote cognitive sophistication need to be developed.
6. *Affective development.* Learning how to think is not enough. Students must also learn to become increasingly sensitive to feelings and values, both in themselves and others. Developing a set of values for oneself is important, but learning to understand and respect (although not

necessarily accepting or condoning) the feelings and values of others (especially those in other cultures) is equally important. Here too, teaching strategies and learning activities to encourage affective development are badly needed.

In brief, if a curriculum is to be an effective vehicle for learning and development in today's world, it must simultaneously build a more sophisticated understanding of the world, help individuals to "know" themselves, use the most durable knowledge available so as to deal effectively with an expanded range of knowledge, be applicable to students with a very wide range of abilities, and provide for both cognitive and affective development.

All of the above suggest a need for a new curriculum pattern. The curriculum design described in this book offers one such pattern. Curriculum can be viewed as a system consisting of a number of interrelated elements. In the curriculum pattern to be described, these elements consist of the following:

1. The overall goals and specific objectives to be obtained.
2. The content from the social sciences, history and other areas of study to be included.
3. The selection and organization of the learning activities to be provided.
4. The selection and organization of the teaching strategies and procedures to be employed.
5. The selection or development of the evaluative measures to be used.

Differences in curriculum organization to some degree grow out of differences in the emphasis accorded to each of the elements listed above, and to the degree to which there are consistency and balance as these elements are developed. During the 1920's for example, there was a strong emphasis on spelling out detailed sequences of specific factual content with an almost total disregard for the processes of learning, or for objectives other than the acquisition of information. The curriculum which resulted was often sterile, irrelevant to student needs and interests, and rigid in format.

The progressive education movement was in many ways a rebellion against this one-sided emphasis of the 1920's. The progressives encouraged a greater concern for the processes of learning and the learner as an individual, but their emphasis in turn produced a curriculum that was somewhat defective in the relative lack of emphasis on the quality of the content with which it dealt. There was a swing toward a belief that it did not matter what you learned but how you learned it.

In the last ten years or so, an emphasis on content has returned, though more and more curriculum workers are realizing the need for a proper balance among emphases on content, learning processes, and the learner as an individual. It is to be emphasized that the five elements mentioned above—objectives, content, learning activities, teaching strategies and procedures, and evaluative measures—are interrelated. They constitute a system of teaching and learning. Each of the elements affects the development of each of the others. Objectives influence the selection of content, but selected content may necessitate a reconsideration of objectives. That content which is selected will suggest certain learning activities, but learning activities may in turn also suggest points at which a different content selection may be more appropriate to develop certain desired objectives. As a curriculum is developed, decisions need to be made not only about each of the elements independently, but also in terms of its interrelationships with the other elements.

Traditional curriculum guides have often failed to make all of these points. In most cases, such guides contain only some of the elements mentioned. A list of objectives, often quite vague, may be given. There may also be a long list of content understandings and of academic skills, followed by an elaboration of the topical outline of content and by a listing of suggested learning activities. Often, however, there is no consistent relationship evident nor is there any connection made between the content topics and the objectives and learning activities. For example, many curriculum guides list "thinking" (frequently called problem solving) as one of their chief objectives. Yet, neither the organization of the content nor the suggested learning activities states in concrete terms how such "thinking" is to be implemented.

The curriculum pattern described in this book, therefore, differs from the more traditional ones in a number of respects:

1. It addresses itself to multiple objectives and provides for the implementation of each.
2. It emphasizes the acquisition, understanding, and use of ideas and concepts rather than facts alone.
3. It defines carefully the terminal behaviors expected of students.
4. It includes a number of especially designed teaching strategies which encourage the development and acquisition of certain specified intellectual skills.
5. It outlines a number of additional procedures which can be adapted to the varying circumstances pertaining in particular classrooms.

6. It encourages student examination of the attitudes and values which they and others possess.
7. It includes sequentially designed learning activities in order to encourage cumulative learning.
8. It provides for continual teacher and student evaluation of student progress.

The implications of this different approach to curriculum design are presented in the chapters which follow.

Chapter 2 EDUCATIONAL OBJECTIVES AND THEIR NATURE

Chapter 1 identified five interrelated elements for curriculum design. The first of these elements, educational objectives, is the subject of this chapter.

EDUCATIONAL OBJECTIVES

Every curriculum needs objectives. They establish a sense of direction and provide a basis for deciding what to include, what to emphasize, and what to ignore in building a curriculum. But from where do objectives originate?

There are a number of sources from which objectives might be derived. For example, no educational program can be effective if it ignores the demands of the society and culture of which it is part. Any society, if it is to endure, must deal with a number of basic concerns. These include the induction of the young into society, the establishment of desirable forms of social control. the maintenance, modification, and improvement of the social and physical environment in which the members of the society live, and the provision of various means by which these same members may express their affective needs (e.g., love, art, music, religion, and literature).

Educational programs, however, are directed toward individuals, and so educational planners need to ask questions which focus attention on those being educated. What are the needs of the students for whom a particular program is intended? What kinds of skills and processes seem essential for individual development? What kinds of knowledge will students need in order to be able to operate effectively within the society in which they live?

The disciplines of knowledge are yet another source to be considered, and again there are important questions that need answering before programs

are set. What kind of skills, processes, and knowledge can these disciplines provide? What aspects of these disciplines will contribute toward a realization of the desired goals of a particular educational program?

In a democratic society such as that of the United States, certain core values (as found in the nation's basic political documents—the Declaration of Independence and the Constitution) provide a basic foundation for all curriculum planners and teachers to consider. These core values include both democratic values (e.g., a belief in the worth and dignity of every human being, personal freedom, equality and justice for all, peace and order among men, economic well-being for all, and a sense of responsibility for, and brotherhood with, one's fellows) and governmental principles (e.g., rule of law, due process of law, equal rights under the law, and the idea of government by representation and consent).

Such values and principles provide a base upon which to build. They suggest overall goals such as the following:

- To help students understand the nature of the society in which they live by seeing something of the nature of its parts, while also comprehending something of its patterns as a whole.
- To help students acquire those skills by which they can operate effectively within the society.
- To help students understand themselves and their fellows as completely as their individual capacities permit.
- To help students acquire the information and skills they will need in order to live and prosper in a pluralistic world.
- To help students become committed to improving the quality of the life which they share in the society, to contribute eventually to the improvement of life for all men everywhere, and to preserve those ideals and values which represent the highest manifestations of the human spirit.

Using these overall goals as a starting point, three major educational objectives were formulated and used as a basis for developing the curriculum to be described in this book. The developers of the curriculum decided that students should be helped to:

- Develop a number of specified thinking skills.
- Acquire, understand, and use a selection of important ideas or elements of knowledge drawn from history and the social sciences (and related areas), and do so through the application of thinking skills on selected content material.

- Form a number of desired attitudes and values, using the above content and thinking skills as a means of developing these, and examine the attitudes and values which they and others already possess;

and, as a contributory objective:

- Develop a variety of additional academic and social skills deemed necessary to attain the three prior objectives above.

In the curriculum described herein, the questions used to help formulate educational objectives are:

1. Do they provide over time for continual student development in the more general objectives and overall goals listed previously?
2. Do they indicate clearly the precise behaviors desired of students?
3. Do they suggest certain kinds of learning activities that may help promote the behaviors identified in (2) above?
4. Are they both logically and psychologically obtainable by students? Answers to questions such as these help us to decide which of many possible goals we want to emphasize.

Let us now look in greater detail at each of the three major categories of educational objectives:

Thinking

This first category, thinking, has long been considered important in curriculum planning. It has frequently been poorly implemented, however, because there has been an insufficient analysis made of the component skills which thinking involves. Because of the lack of analysis, many educators as well as laymen assumed that the capacity to think depends on: (a) acquiring a great deal of factual knowledge over a period of time before it is possible or even permissible to use and to think about such knowledge; (b) a native ability which only some fortunate individuals (e.g. the very bright) possess; or on (c) studying certain so-called "intellectually demanding" subjects such as the physical sciences or mathematics, regardless of how they are taught.

The curriculum described herein, on the other hand, supported by a considerable amount of research[1] assumes that thinking is learned, that it is

[1] J. S. Bruner , J. J. Goodnow, and G. A. Austin, *A Study of Thinking*. New York: John Wiley, 1956. J. Paiget, *The Psychology of Intelligence*. New York: Harcourt, Brace and World, 1950. Alina Szeminska in *Thought in the Young Child*. W. Kessen and C. Kuhlman (Eds.), Indiana Society for Research in Child Development, 1962. L. Vygotsky, *Thought and Language*. Cambridge: M.I.T. Press, 1962.

learned developmentally, and that thinking skills can be taught systematically. The following additional assumptions are proposed:

1. Thinking involves an active transaction between an individual and the data with which he is working. Data become meaningful only when an individual performs certain cognitive operations upon such data.
2. The ability to think cannot be "given" by teachers to students. Effective thinking depends on the richness of content, the processes used, and the initial assistance provided in the development of such processes.
3. All school children are capable of thinking at abstract levels, though the quality of individual thinking differs markedly.
4. All subjects offer an appropriate context for thinking.
5. Precise teaching strategies can be developed which will encourage and improve student thinking.

The concept of cognitive strategies was developed by the late Hilda Taba as one means of implementing these assumptions.[2] Basic cognitive strategies were identified from theory and research, and a logical sequence of questions was designed to promote the acquisition of each of them. Three of the basic strategies identified were:

1. *Developing concepts*, in which students list, group and regroup a number of items and then label the groups.
2. *Inferring and generalizing*, in which students make inferences and generalize about the relationships they observe among various kinds of data.
3. *Applying generalizations*, in which students are asked to apply previously learned generalizations and facts to predict what might logically occur in a new situation.[3]

Knowledge

This second category has been further subdivided into three additional categories or levels of knowledge: key concepts; main, organizing, and contributing ideas; and specific factual samples. Each of these levels serves a different function in curriculum development.

---

[2] See Hilda Taba, Samuel Levine, and Freeman Elzey, *Thinking in Elementary School Children*, Final Project, No. 1574, U.S. Office of Education.

[3] A detailed treatment of these tasks is presented in Chapter 5.

- *Key concepts.* These are words which represent highly generalized abstractions.[4] These powerful abstractions from a variety of disciplines of knowledge are selected because of their power to organize and synthesize large numbers of specific facts and ideas. Because of their power, such concepts can be developed in an increasingly more complex and abstract manner throughout the social studies. They suggest not only the main and organizing ideas around which units can be developed, but they also serve as threads throughout the entire 1–8 program.[5] Understanding of these concepts (e.g., interdependence, cooperation, cultural change, societal control) is expanded and deepened throughout the grades.

- *Main ideas.* These are generalizations, usually (though not necessarily) less abstract in nature than the key concepts and expressed in the form of sentences. For example, a main idea at the third grade level is "Tradition influences the ways in which a group of people modify their behavior." Each individual unit within any year's work, however, centers around both a main and an organizing idea. These organizing ideas (e.g., at the third grade level, "The rules and customs of the desert nomad help maintain his traditional life") represent a special case of one of the main ideas. They are appropriate to the grade level for which a unit is designed, and deal with the particular content being studied in the unit. In turn, these main ideas are supported, where appropriate or necessary, by a number of contributing ideas. Contributing ideas represent generalizations that illustrate further dimensions of the main idea and serve as a guide to the selection of specific content examples to illustrate, develop, and explain the organizing and the main idea.

- *Content samples* (e.g., a variety of specific details about the lives of the ancient Greeks) are chosen to provide the means of illustrating, explaining, and developing the main and organizing ideas. Each content sample is in the form of an in-depth study of human behavior and consists of a variety of specific details or facts about that behavior. Any one of a variety of content samples may be used to develop the more fundamental concepts and ideas described above.

---

[4] This definition of a key concept as a high level abstraction is used throughout this book. At no time does it refer to concepts such as dog, food, or flower, which are at a lower order of abstraction.

[5] See Chapter 3 for an explanation of the "spiraling of concepts."

All three levels of knowledge are chosen on the basis of specific and clearly identified criteria which include:

1. Validity (up-to-dateness).
2. Significance (fundamental information).
3. Relevance (to the realities of today's world and to the interests and concerns of the students).
4. Relationship (to student's needs, and development level).
5. Depth (richness).
6. Breadth (of applicability).
7. Ability of the content to lend itself to the development of other objectives—attitudes, feelings, sensitivities, thinking, and social skills.

Attitudes, Feelings, and Values

This third category places particular emphasis upon helping students to develop their own values, and to understand and to analyze the values of others.

General goals by which the above emphasis can be encouraged include developing in students the following:

- The capacity to understand and identify with individuals possessing different lifestyles than their own.
- The self-security that permits individuals to be comfortable, when a situation warrants, in differing in words and actions from others.
- The open-mindedness that permits an examination of opinions and of individual ways with reasonable consideration and objectivity.
- The capability not only to expect but to also evaluate change, and then to adjust accordingly to new ways and events.
- A tolerance for uncertainty and ambiguity with minimal anxiety.
- A responsiveness to democratic and human values that enable responsible conduct in the interests of humanity and effective participation in societal affairs to that end.

Three specific teaching strategies (see Chapter 5) have been prepared to encourage the development of the above goals:

1. *Exploring feelings*, in which students are asked to identify how they think individuals placed in emotional situations feel, and then to make

inferences about their own and others' feelings in similar situations and, if appropriate, to generalize to feelings of people in general.

2. *Interpersonal problem solving*, in which students are presented with a problem situation involving interpersonal conflict, asked to analyze what the protagonist(s) in the situation should do, compare what they think the protagonist should do with similar things they have done in their own lives, and then evaluate whether what was done in each of the situations was good or bad, and why.

3. *Analyzing values*, in which students are asked to recall certain behaviors, infer as to what values are involved, and then explain how the values which they have identified as being involved may (if at all) differ from the values of others involved in analogous situations.[6]

Academic and Social Skills

This fourth category includes a number of skills deemed necessary for students to possess in order for them to acquire the three prior, and more essential, objectives listed above. These skills include academic skills such as the ability to read and interpret maps, charts and graphs, to construct timelines, to take notes and outline, to use multiple references, to read widely but also selectively, to collect data from a variety of sources, to ask appropriate questions, to organize information around study questions, and to develop reasonable hypotheses.

Social skills include such abilities as planning jointly, participating productively in discussions, developing ideas through interaction with others, responding courteously to others' queries, and working jointly on group investigations.[7]

IMPLEMENTATION OF MULTIPLE OBJECTIVES

It is important to differentiate among the four areas described above so that effective planning of a curriculum can take place. Different teaching-learning strategies are required for each to be accomplished. For example, students can learn a specific date such as the discovery of America by

---

[6] A detailed discussion of these tasks is presented in Chapter 5.
[7] Social and academic skills are discussed in detail in Chapter 7.

means of straightforward presentation and recall of information, but learning to conceptualize or make warranted inferences from data requires frequent practice over an extended period of time. Attitudes and feelings are not changed by studying facts alone; they are changed through participating in experiences, real or vicarious, which have an emotional impact.

It needs to be emphasized that the selection and organization of content implement only one of the three major objectives—that of knowledge. But content by itself does not develop the techniques and skills needed for thinking; does not change or develop patterns of attitudes and feelings; nor does it produce the necessary social and academic skills. These educational objectives are achieved primarily by the way in which learning activities are planned and carried out in the classroom.[8] It is essential, therefore, that learning activities be designed or selected to develop more than one objective at a time. This fact—that learning activities need to serve multiple ends—suggests two important consequences for the organization of curriculum. First, if the various categories of objectives—thinking, knowledge, attitudes, feelings, values, and skills—are to be implemented effectively and carefully in the classroom, curriculum planning must take into account both content and learning activities.

The second consequence of designing learning activities to serve multiple ends is the need to plan for incremental learning. In each of the three categories of objectives, each learning activity should build on those activities that have been developed earlier. For example, it is necessary to ensure that the learning activities focus on the key concepts and main ideas selected, and develop them in increasing breadth and depth from unit to unit and from year to year. It is equally important to assure incremental development in such tasks as the capacity to interpret data and to develop the level of proficiency in map reading and interpretation, or the construction and interpretation of time lines needed in achieving the major objectives of the curriculum. It is also important to provide increasing opportunities for students to be exposed to, and empathize with, the feelings and values of others in different cultures.

As they stand, these educational objectives, like the overall goals from which they stem, are much too general to be implemented effectively in the classroom, since they do not indicate precisely enough what students are expected to accomplish. They are further broken down, therefore, into a number of more precisely stated instructional objectives.

---

[8] Learning activities are explored more fully in Chapter 4.

Instructional Objectives

Examples of instructional objectives from various grades are given below.

In the Third Grade:

Given access to appropriate materials on the peoples studied in this year of the program, the student lists a number of items on the people or on their environment, then groups the items and assigns logically defensible and conceptually powerful (that is, abstract) labels, and when requested, re-forms and relabels the items in equally defensible ways. Examples of the kinds of items the students will list, group, and label are: tools, materials, activities, climatic conditions, things children learn, ways of learning, role expectations, ways of getting water, reasons for traveling, things people buy and sell, farm products, techniques of farming, and physical features of the environment.

Rationale: Acquiring the ability to list, group, and label (concept development) is an important intermediate step in the acquisition of other thinking skills and is considered a powerful intellectual skill in its own right because the curriculum is intended to facilitate the ability to develop more abstract concepts. Ability to regroup is regarded as an important component of intellectual flexibility.

In the Sixth Grade:

Given a detailed set of facts, the student states valid generalizations that he had not been given previously, and when asked, provides the sources and limitations of the generalizations. Examples of facts and acceptable generalizations based on them that students might state are listed below.

Kinds of facts given	*Examples of generalizations*
Religious practices of Aztecs before and after the arrival of the Spaniards.	The Aztecs adopted many of the religious practices of the Spaniards, but kept many of their own.
Maps showing population density and land use of regions of Middle and South America.	There are a great many more people per square mile in regions where there are many factory workers, than in regions where most of the workers are farmers or ranchers.
Amount of education received by people in the various countries of Middle and South America.	Illiteracy is a problem in many countries in Middle and South America.

Rationale: Ability to form generalizations is one of the skills that is emphasized in this curriculum and is important in relation to other thinking skills such as the formation of hypotheses. Making generalizations is also an important aspect of the development of attitudes. (It should be noted that such generalizations act as guides to the kinds of questions teachers will ask and to the material selected rather than the specific words that students will remember.)

In the Eighth Grade:

Given a discussion setting, or other situation, in which students can express their ideas without censure or ridicule, the student makes statements that describe what the teacher judges to be the probable feelings or other thoughts of people studied in the various units of the eighth grade program. Statements indicative of the desired attitude are:

> "I can understand why some of the colonists thought the revolution against England was all wrong. They, no doubt, felt a great deal of loyalty to England and favored working to correct the unfair policies, rather than breaking off from England completely."
>
> "The southern whites who grew up in a system in which slavery was an accepted part of the way of life probably had difficulty in seeing why others thought it was so evil."
>
> "The homesteaders must have felt a sense of real pride once they got themselves established on their own land."
>
> "The former slaves must have felt very bitter when they ran into so much difficulty in finding a good life even after they were freed from their masters."
>
> "The early colonists must have been very excited as they set out from the mother country to seek a new life—maybe a little afraid too."

Rationale: These kinds of statements suggest an attitude of empathy. Such an attitude is important because it is part of the decentering process. That is, it is a step in the direction of overcoming the self-centeredness which, according to Piaget and others, characterizes much of the behavior of the young child. Unless the child has empathy for the thoughts and feelings of others, he will have difficulty understanding and applying generalizations pertaining to cooperation and to resolution of conflicts among individuals and groups. It must be noted here that when a student empathizes he does not necessarily accept the values of others. In fact, there

will be occasions when he will clearly say to himself: "I can see something of why these people behave as they do, but I do not like this behavior and consider it to be bad behavior."

SUMMARY

This chapter has attempted to describe briefly the source and the nature of the objectives emphasized in the curriculum and their implementation. It has been pointed out and stressed that objectives affect and are affected by each of the other major elements of the curriculum, i.e., content, learning activities, teaching strategies, and evaluative measures, mentioned in Chapter 1. It is the second of these elements, content and its selection and organization, to which we now turn in Chapter 3.

SELECTION AND ORGANIZATION OF CONTENT

Chapter 3

This discussion of the selection and organization of content should make the functional value of the three levels of basic knowledge more apparent. Each of the three levels of basic knowledge (key concepts, main ideas, and specific facts) serves a different role in the organizational plans of the teacher's guides that are a key element of the curriculum. The differentiation of three levels of knowledge also helps to deal with the conflict between the need to cover many areas of knowledge and the demands for greater understanding, for autonomous inquiry, and for application of knowledge.

CONTENT STRUCTURE—A BASIS FOR ORGANIZATION

Key Concepts

The key concepts of this curriculum, such as, Cultural Change, Cooperation, Interdependence, Differences, and Causality, were selected for their power to organize and to synthesize large amounts of information. Each of the key concepts forms a hierarchy in the sense that each can be acquired and used on different levels of abstraction, complexity, and generality. An illustration of this is to be found in the hierarchical order of the concept of interdependence as it concerns relationships of people to people.

Interdependence in People-to-People Relationships

8th level between the governments of nations
7th level between nations with different ideas
6th level between nations with different physical resources
5th level between industries and government
4th level between industries and specialized workers
3rd level between communities with different economic bases
2nd level between community workers
1st level between family members

This hierarchical arrangement suggests that understanding of interdependence developed at the first level is included in the second and that each successive level of learning includes understanding of interdependence from the levels below it. In a sense, each level is a prerequisite to the next.

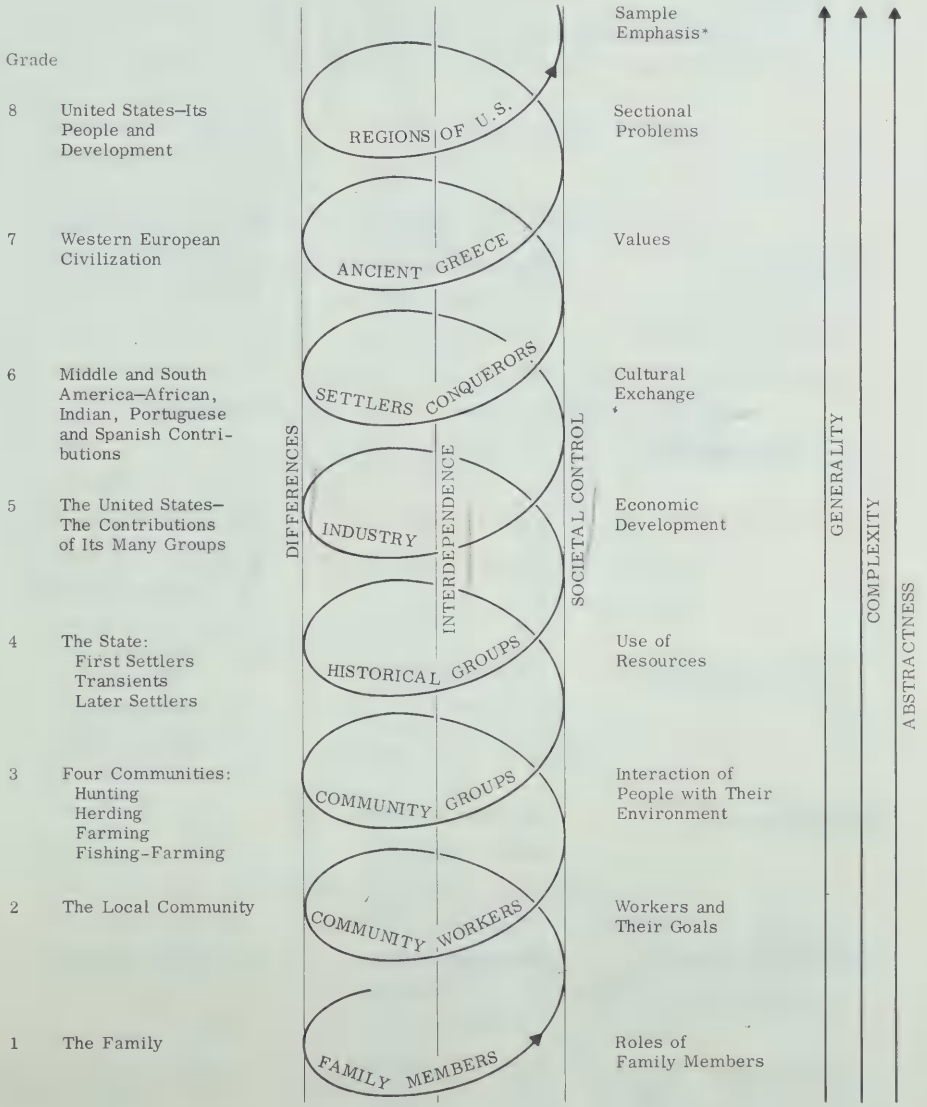
The hierarchical nature of the concepts makes it impossible to develop them fully in one unit or even on any one grade level; they must be dealt with on several grade levels. The concepts must be visualized as threads which appear over and over again in a spiral fashion but which always are moving to a higher level.

Figure 1 shows how three key concepts—Difference, Interdependence, and Societal Control—thread their way through topics on successive grade levels: family in grade one, community in grade two, contrasting economies in grade three, the state in grade four, the United States in grade five, Middle and South American in grade six, Western European civilization in grade seven, and United States history in grade eight.

As illustrated in Figure 1, the first grade deals with interdependence among family members. In the second grade, interdependence appears on a more abstract and complex level, namely, the interdependence of services in the community. The third grade studies the interdependence of members of contrasting economies as demonstrated by the cooperative securing of necessities. The fourth grade takes up the interdependence between production areas in a state (e.g., valleys that produce abundant food and mountains that produce abundant minerals). In the fifth grade, interdependence among the large production areas in the United States is emphasized. In the sixth grade, there is a study of interdependence among nations of Middle and South America and with other nations of the world. The seventh grade explores the interdependence among several cultures in the exchange of ideas and inventions. Finally, the eighth grade considers the interdependence between social groups within the United States.

FIGURE 1

The Spiral Development of Three Key Concepts*



* The sample shown on this chart does not represent the emphasis for the year's program.

CHART 1

The Sequence for Developing the Concepts
"Differences," "Interdependence," "Societal Control"

Grade	*Differences*	*Interdependence*	*Societal Control*
1.	In family composition and size	Of the members of the nuclear family with the extended family	By means of child-rearing within the family
	In family responsibility	Of the family group	By means of church and school
	In family life style		
2.	In kinds of services	Of a service with workers, consumers	By rules which regulate the behavior of people and organizations
	In kinds of communities	Of each service with other services	By means of rules which support the way people wish to provide services
	In use of land	Of farmers and their environment	
3.	In family structure of different cultural groups	Of all people within the community	By means of ways people of selected cultures rear their young
	In education, recreation, leadership of different groups	With people outside the community	By means of laws and customs that punish adults
	In basic economy of different groups	Of people with their environment	

Grade	*Differences*	*Interdependence*	*Societal Control*
4.	In the goals of people at different periods of history	Of the state with other areas	In early groups within state
	In topography and climate	Of urban and rural areas	Change in laws as later groups came
	In types of commerce	Of people and natural resources	
5.	In life among the colonies	Of geographical regions	In laws related to the use of natural resources
	In ways of acquiring land	Of the United States and Canada	Through laws related to education
	In contributions of ethnic groups	Of one industry with others	
6.	In ethnic makeup	Of surplus production and trade	Within the extended family in the villages
	In human and physical resources	Of trade and standard of living	By means of law in the cities
	Between city and rural living	Of countries with contrasting resources	
7.	In values among people in different periods of time	Of a culture with others for the exchange of ideas and inventions	By means of written law
	In kinds of pressures that bring change	In the interaction of man and his environment resulting in change of both	By means of social organization
8.	In economies and points of view, regarding governmental acts	Of the United States with other nations	Change in written law over a period of time
	In goals resulting in conflict	Of the industrial development with political events	Problems of law in attempting impartiality of treatment of its members

Chart 1 shows the spiraling of three concepts in greater detail. In this sequential treatment, more facts are included as the concepts, and hence the pattern of relationships encompassed by each, become more complex and more abstract. In other words, the treatment of interdependence in the sixth grade is on a higher level of abstraction than it is in the first grade.

Abstractness, generality, and complexity are the lines of growth in the spiraling sequence. Content in the second grade adds in generality, abstractness, and complexity to that learned in the first grade. If there is a twelve-year sequence there is a twelve-year spiral. Dealing in several grade levels with the same concepts means, of course, that the number of key concepts that can be developed over the whole program is relatively small.

The full range of concepts which thread through the program are listed below. These key concepts are treated again and again throughout the eight grades. Thus, as the student's own experience broadens and his intellectual capacities develop, the curriculum provides him with repeated opportunities in a variety of contexts to develop an increasingly sophisticated understanding of these concepts.

CAUSALITY

Events often can be made meaningful through the study of their antecedents. Hence, to some extent, future events can be predicted.

Events rarely have a single cause, but rather result from a number of antecedents impinging on one another in a given segment of time and space.

CONFLICT

Interaction among individuals or groups frequently results in hostile encounters or struggles.

Conflict is characteristic of the growth and development of individuals and of civilization as a whole.

There are culturally approved and disapproved means for resolving all varieties of conflicts.

Irrational conflict is reduced by recognition of the inevitability of differences and of the difficulty of determining their relative value.

In most situations, some form of compromise is necessary because of the serious consequences of sustained conflict.

COOPERATION

The solution of important human problems requires human beings to engage in joint effort.

The more complex the society is, the more cooperation is required.

Cooperation often requires compromise and postponement of immediate satisfactions.

CULTURAL CHANGE

Cultures never remain static, although the context of the change (economic, political, social, and technological), the speed of the change, and the importance of the change vary greatly.

Cultural change is accelerated by such factors as increased knowledge, mobility, and communication, operating both within and between cultures.

DIFFERENCES

The physical, social, and biological worlds (including human beings and their institutions) show extreme variation.

Survival of any species depends on these differences.

Conflicts and inequities often result from assigning value to particular categories of differences, such as white skin or high intelligence.

INTERDEPENDENCE

All persons and groups of persons depend upon other persons and groups for satisfaction of needs.

Behavior of each person and group affects other persons and groups in important ways. These effects on others are often indirect and not apparent.

MODIFICATION

As man interacts with his physical and social environment, both he and the environment are changed.

Man has often exploited his physical environment to his own detriment.

POWER

Individuals and groups vary as to the amount of influence they can exert in making and carrying out decisions which affect people's lives significantly.

As a strong motivating factor in individual and group action, the desire for power often leads to conflict.

SOCIETAL CONTROL

All societies influence and attempt to mold the conduct or behaviors of their members. The techniques used include percept, example, and systems of reward and punishment; the specifics of these techniques vary greatly from one to another.

Marked differences in child-rearing practices often exist among societies.

All societies have some way of punishing adults who do not conform to established ways. The means of punishment include ridicule, shaming, and ostracism, as well as physical punishment and execution.

Written laws are an attempt to clarify the rules by which society operates and to promote an impartial treatment of its members.

Everyone belongs to many groups with overlapping membership, different purposes, and often conflicting demands on members in terms of duties, responsibilities and rights; each, by exerting social controls, shapes the personality structure and behavior of its members.

TRADITION

Societies and the groups and individuals within them tend to retain many traditional values, attitudes, and ways of living and dealing with current problems, whether or not that behavior is appropriate.

Certain institutions in societies, such as family, religion, and education, tend to change less rapidly than do other elements of societies.

VALUES

Those objects, behaviors, ideas, or institutions which a society or an individual considers important and desires constitute values.

Whether or not a person holds a value can be inferred by others only on the basis of an extensive sample of his behavior.

Societies and individuals often differ significantly in the values they hold.

Values develop through both nonrational and rational processes.

The survival of a society is dependent upon agreement on some core of values by a majority of its members.

The greater the variety of values within a society, the greater the likelihood of disagreement and conflict; in some societies such conflict is accepted as necessary to the realization of core values.

The key concepts like the ones above form a list against which a curriculum worker may check both the main ideas[1] to ascertain whether opportunities have been provided to deal with these concepts, and the learning activities to determine whether adequate emphasis is being placed on their development. The teacher may also find the list helpful as he examines the material he is using for gaps that may exist, or for inadequate or incorrect emphasis, or as he prepares evaluation exercises, and thereby looks for suitable understanding of what has been covered.

Main and Organizing Ideas

Each year's work in this curriculum centers on several main ideas.[2] In the Taba curriculum the main ideas originated with small groups of teachers who were asked repeatedly, "What do you hope the students will remember after they have forgotten many of the specifics they are now learning?" When these small grade-level groups reached agreement on what they considered a major idea it was then submitted to an academic specialist who considered the validity of the statement and its significance to his discipline. Early in the development of the curriculum, these ideas tended to be descriptive or limited to the data dealt with at a particular grade level. Work by both academicians and project staff members converted many of these into more powerful statements that could be supported by different data from several grade levels. Some of the ideas generated became organizing ideas, which are more limited in their power; others were changed or discarded as emphasis in the program changed. Other ideas equally valid and significant might have been generated and related to the study of a topic. Those of the Taba curriculum reflect both the emphasis the teachers wished to give, and the thinking of specialists and the project staff members.

Individual units within a year's sequence are organized around these main ideas for several reasons. Main ideas make a better center of organization than do topics because they act as criteria for selecting or deleting specific information. Such criteria help to solve the problem of coverage. Main ideas also provide a focus for interpreting the selected facts

---

[1] It should be noted that key concepts are the labels for groups made up of main ideas.
[2] See Appendix I for a complete list of the main and organizing ideas in the units for grades 1–8.

as well as for determining which dimensions of a particular topic to develop. Centering on main ideas also curtails the compartmentalization of knowledge. It is possible to cut across several disciplines and thus to integrate knowledge. However, it should be noted that some units do have greater affinity with one area of knowledge than do others.

An idea-centered curriculum simplifies revisions. The "earthquake" approach to curriculum revision, when everything is taken apart in order to start over, is no longer needed. It is possible to omit one idea, to develop other ideas in greater depth, or to alter a sample of specific content. Current information can be substituted for obsolete information, or a unit can be condensed. Furthermore, any single "big idea" can be developed in various ways and by different descriptive facts. This makes it possible to adjust the curriculum to individual interests and motivational patterns. The level of sophistication reached and the depth of exploration of the idea will differ according to the age, background, grade level, and/or abilities of the pupils.

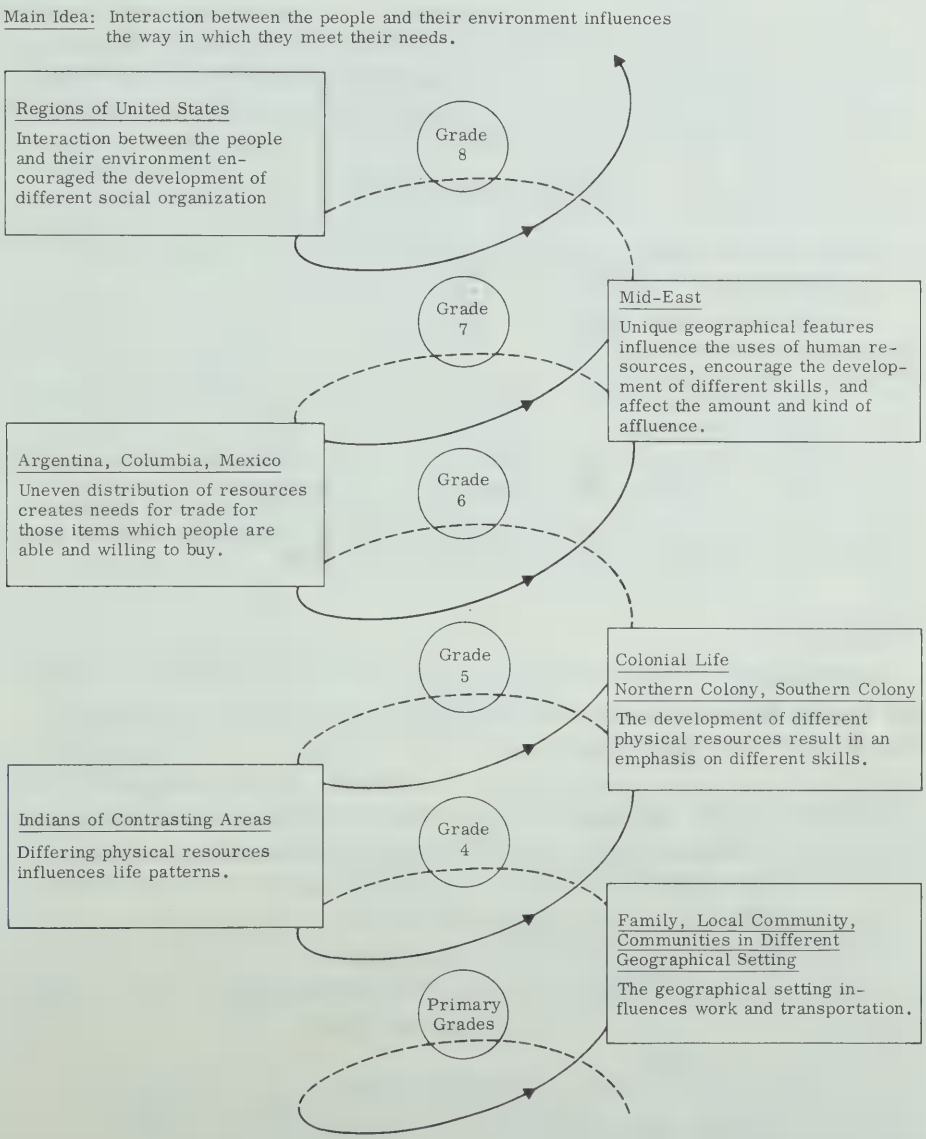
The wording of the main idea is often in adult terms and it expresses a relationship which applies to the content being studied as well as to parallel examples of human behavior from other settings. The organizing idea is an example of the relationship stated in the main idea and around which the particular content sample and the teaching-learning activities are organized. It is stated in terms students might be expected to use and understand and it is more directly related to the content dealt with in the unit than is the main idea. In no event should either a main or an organizing idea be handed to the child. But, given the content which was selected for its relevance to the main idea and the questions about it which were chosen because they would direct thinking toward the main idea and the organizing idea, many students will move toward them in their thinking and some will even reproduce their essence in a modified form. A student's expression of them should stem from his own thinking about the data being studied and should be expressed in his own words.

The following criteria were used for judging the main ideas around which each year's work of the Taba curriculum is centered:

1. *Validity:* Do they adequately represent concepts of the discipline from which they are drawn?
2. *Significance:* Can they explain important segments of the world today, and are they descriptive of important aspects of human behavior?
3. *Durability:* Are they of lasting importance?
4. *Balance:* Do they permit development of student thinking in both scope and depth?

FIGURE 2

The Spiral Development of a Main Idea*


Main Idea: Interaction between the people and their environment influences the way in which they meet their needs.
Regions of United States
Interaction between the people and their environment encouraged the development of different social organization
Grade 8
Grade 7
Mid-East
Unique geographical features influence the uses of human resources, encourage the development of different skills, and affect the amount and kind of affluence.
Argentina, Columbia, Mexico
Uneven distribution of resources creates needs for trade for those items which people are able and willing to buy.
Grade 6
Grade 5
Colonial Life
Northern Colony, Southern Colony
The development of different physical resources result in an emphasis on different skills.
Indians of Contrasting Areas
Differing physical resources influences life patterns.
Grade 4
Family, Local Community, Communities in Different Geographical Setting
The geographical setting influences work and transportation.
Primary Grades

* Note that the similarity in the processes of development of key concepts and main ideas stems from the fact that main ideas are contained within and are therefore a part of the key concepts.

5. *Appropriateness:* Are they suited to needs, interests, and maturational level of students?

It is worth reiterating here that specialists from the various social science disciplines and history provided valuable assistance in identifying and checking ideas against the criteria listed above and that extensive use of these specialists was a particular feature of the Taba curriculum.

Main ideas often form hierarchies and may reappear in units at several grade levels, though they may be expressed differently each time and cover a greater range of human behavior at each successive level. Figure 2 illustrates the spiral development of a main idea.

A main idea that reappears at different grade levels may receive an emphasis from various disciplines at the different grade levels. For example, in Grade 1 the interaction between people and their environment draws heavily on sociology in the study of the family; Grades 2, 6, and 7 are oriented toward anthropology; Grades 5 and 8 have a greater affinity for the area of history. However, the learnings from the various social science disciplines are not dealt with discretely; rather each main idea may be developed by using knowledge from several disciplines.

Specific Facts

Because specific facts become obsolete more rapidly and in this sense are less durable than key concepts or main ideas, they are not significant in themselves. Their chief function is to explain, illustrate, and develop main ideas. For example, the significance of the data on the percentage of Venezuela's exports represented by oil lies in the inference a student might make about Venezuela being a one-commodity export country and the effects of this upon the lives of people there and elsewhere. The very fact that a student has noted the relationship between the commodity and the total export figure may well help him retain pertinent facts, but more importantly, his study of these particular facts will have provided him with important ideas about Venezuelan life and have added to his understanding of economic relationships.

The main criterion used for selecting specific facts is that they be a sufficiently adequate demonstration of the main idea to provide students with opportunities to develop rational generalizations which will approximate main or organizing ideas. Since several different samplings of specific facts can be used equally well to develop the same generalization, alternative sets of specific data can be used, provided they are adequate instances of the idea under consideration. Such alternatives can be selected

according to what materials are available, what kinds of students are represented, what the teacher likes to teach, the contrasts provided by the content, and the mileage one is able to get from them. For instance, in determining the services to be studied in the second grade one might look at the work of the policeman, fireman, teacher. Yet all three provide services only through the government. If a student examines the fireman, TV-repairman, and the banker, he can look not only at the services needed but also at the variety of ways people secure services—through government, small business, and big company.

Thus, it follows that specific knowledge is to be sampled and used to develop important ideas rather than just to be covered. Understanding of main ideas can be developed through study of selected samplings of contrasting data. A clearer understanding of an idea is more likely to emerge from a depth study of one or two contrasting samples than from a necessarily limited study of many samples. For example, in teaching American history in the fifth grade, the main idea might be that the way of life in the colonies was influenced by two factors: (1) who the settlers were and what they brought with them (ideas, beliefs, skills, tastes, etc.), and (2) whether or not the characteristics of their landing place (people, climate, soil, etc.) were hospitable. It is possible that students can learn more about this aspect of colonial life by a detailed study of two contrasting colonies than by rapid and superficial study of all thirteen colonies. This does not imply that the other eleven colonies will not be mentioned but, rather, that the important ideas about colonization will best be conveyed through limited depth studies.

As another example, there is no need to study everything about hunting and modern cultures to develop the main idea that contact between cultures often brings changes in the social institutions within them. Information about representative cultures is best confined to a few instances of contrast (e.g., between the ways of rearing children, the ways of settling disputes, and between the religions of the people) if a student's thinking is to move toward the main idea.

To summarize:

1. An effort was made to select the specific content for this curriculum in such a way that at least two contrasting samples of concrete content were available for each idea where comparison and contrast were appropriate.
2. The coverage of specific content was consciously reduced as compared with other curricula, but the depth was increased.

3. Students were not expected to remember all the specific facts they used to develop understanding of a main idea, but instead were expected to use facts as a vehicle for developing ideas about human behavior that will contribute toward their understanding of human beings.
4. Teachers were encouraged to replace one set of facts with another as they deemed appropriate.
5. Through the elimination of unnecessary coverage time was released for the children to learn about the process of thinking.
6. Coverage was limited to a manageable amount.

Two results were anticipated—ideas would be more clearly understood, and students would discover ideas inductively. Consequently, the possibility of applying what was learned toward a better understanding of human behavior was more assured than it would have been if students had just studied facts to remember them.

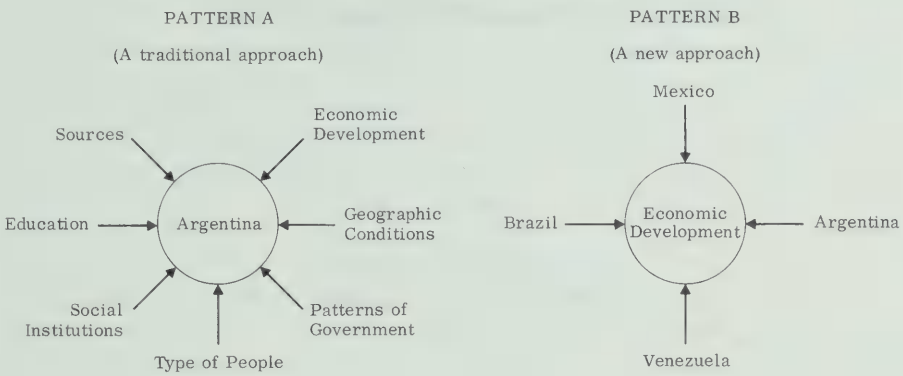
PATTERNS FOR CONTENT ORGANIZATION

In the teacher's guides that spell out the curriculum, curriculum content is organized differently from that of a more traditional curriculum. For example, the usual organization of history, which is considered the "logical" one, has been by chronological sequence. However, this conception of the logical organization of content overlooks the fact that history has both a warp (chronological order) and a woof (events happening at the same time).

Traditionally, the "logical" organization of geographic facts is country by country, as shown in Pattern A of Figure 3. In studying Middle and South America, twenty countries are covered and the same questions are repeated about each. This traditional approach is likely to overburden pupils with details which are not systematized by ideas. Therefore, students tend to be confused by the multitude of details or forget them.

A different approach (Pattern B) which illustrates the organization of a sixth-grade study of Middle and South America is offered in this curriculum. Various dimensions of life in a selected sample of countries are examined. This organization affords pupils an opportunity to compare, to contrast, and thus to perceive relationships. In other words, the new pattern of organization provides a better "handle" for durable knowledge, creates less pressure for coverage of large amounts of content, and affords time to develop significant ideas with which to interpret life in Middle and South America. The aim, then, is not to learn all about Middle and South America

FIGURE 3



but, rather, about important aspects of life there which illustrate important characteristics of human behavior. In constructing this particular pattern, the dimensions of life to be studied were selected first, e.g., economic development, education, cultural patterns. Then the dimensions were studied in detail in two or three countries selected for contrast.

As a second example, for the study of cultural change, the Aztec, African, and Spanish civilizations of pre-Columbian times were sampled because they represent cultures that met in the western hemisphere and created new cultures in the process. Such a selection differs from the traditional approach of studying several different tribes of Indians and then looking only at the changes brought by the Spanish, thereby disregarding the fact that the Spanish also changed and totally ignoring the immense contribution of the African in the Americas.

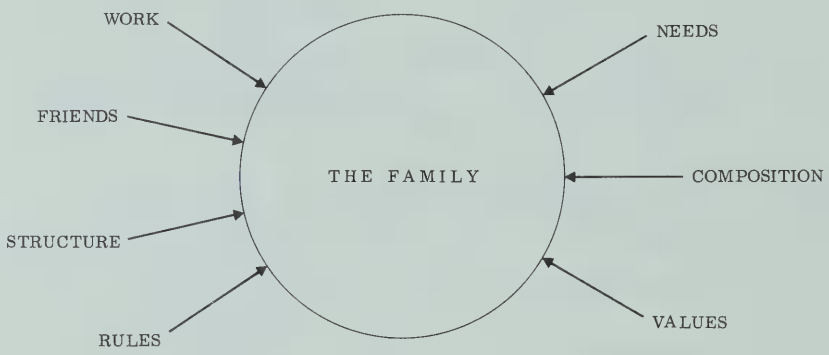
Other patterns for plotting content organization and its dimensions are illustrated by an outline of several units in the first and second grades (Figures 4 and 5).

SUMMARY

Each teacher's guide consists of several items: the area to be studied, the key concepts to be stressed, the main ideas, the organizing ideas and the contributing ideas, the dimensions for study (as dictated by the main idea), and the sample of the specific instances, or details, to study about each dimension. The emphasis throughout is upon ideas rather than upon factual content alone.

FIGURE 4

A Pattern for Organizing Content in Grade 1



Unit I

Main Idea: The socialization of children takes place primarily within the family, peer, educational, and religious institutions.

Organizing Idea: Children learn from their parents, friends, teachers, ministers (or priest, rabbi, guru, etc.).

Unit II

Main Idea: Families differ in lifestyle and role expectations.

Organizing Idea: Each family differs in the way it lives and the rules it makes for it members.

Unit III

Main Idea: The institutions of a society are economically sustained through a variety of means.

Organizing Idea: Families may be supported through such activities as fathers working, mothers working, . . .

FIGURE 5

A Pattern for Organizing Content in Grade 2

Unit I

Main Idea: Community needs are met by groups of people engaged in many related activities.

Organizing Idea: Some groups of workers produce goods people need; others produce services that are needed by other workers or by the community in general.

Unit II

Main Idea: The nature of a particular community will influence the kinds of services it needs.

Organizing Idea: Industrial, commuting, and farm communities each require particular services.

Unit III

Main Idea: The people of a community organize in different ways in order to attain their goals.

Organizing Idea: Some goods and/or services are provided by business, government, and volunteer groups.

The development and the organization of content thus proceed from concepts to main ideas and from there to specific content. However, the learning sequence is in reverse: the students start with specific instances and then develop the main or organizing idea. Concepts are formulated across many main ideas in several contexts (see Figure 6) and in the way described on pages 19–20.

FIGURE 6

Contrasting Sequences in Curriculum Development and Learning

Curriculum Development		*Examples*	
		Grade 3	*Grade 7*
	Concept	*Interdependence*	*Interdependence*
	Main Ideas	Interaction between the physical environment and a people influences the way in which they meet their needs.	Man's ways of living affect, and are affected by, the physical and social environment in which he lives.
	Specific Content	Bedouin nomads of the Negev Desert The fishermen-farmers of Norway's west coast	Sumer Egypt Phoenicia
↓ Child's Learning ↑			

The first arrow in Figure 6 indicates the direction in which curriculum development moves from a key concept through the formulation of an idea to the decision as to which factual sample will be presented to the child. The second arrow indicates the direction in which the student moves by starting with the intake of factual information in specific areas. Through the processing of these data the student might logically be expected to see some relationships between man and his environment. With a number of encounters with an idea at different grade levels, the concept of interdependence becomes more abstract, more complex, and more powerful.

Chapter 4 SELECTION AND ORGANIZATION OF LEARNING ACTIVITIES

As we deal with the third element of curriculum, it is well to recall a point which was made in Chapter 2. The means for reaching two of our three areas of objectives lies in the selection and organization of the learning activities, not in the choice of content. Because learning activities play such an important role, they are listed in detail, organized in sequence, and numbered for order in each unit of study. The sequential development of learning experiences is of utmost importance. In this sense the guides become teaching guides rather than resource guides.

CRITERIA FOR PRODUCTIVE LEARNING

The rationale for sequential ordering of learning activities becomes apparent when one examines the criteria for productive learning:

1. Every learning activity must serve a justifiable and identifiable function related to one or more objectives. Otherwise, the activity may result in diverting the teaching from its proper function. Since each objective represents a different kind of behavior, each also requires a clearly differentiated way of learning. One cannot assume, for example, that learning about significant content as a means toward the development of valid generalizations automatically results in the production of appropriate attitudes. Attitude change and attitude development are difficult to achieve and cannot be left to chance or to incidental learning.

2. The total sequence of learning activities must provide means for the realization of all three of the objectives (basic knowledge; thinking; and

attitudes, feelings, and values). The sequence must also provide for the introduction and maintenance of those academic and social skills that are useful in achieving the major objectives efficiently and effectively.

3. Productive learning activities are those which contribute to more than one objective and thus provide for multiple learnings. For example, a learning activity should provide for mastery of content in a manner that simultaneously promotes and is associated with thinking skills.

4. Learning activities should be organized in sequential order to maintain continuity in learning. Each learning activity should build on previous learning, and each new activity should develop a basis for performance required in the subsequent one. In developing attitudes and thinking skills, this continuity is especially important. Neither is learned instantaneously. Both take time and gradual building. A cumulative and a developmental learning sequence also imply that learning activities proceed from the concrete to the abstract, from the experientially close to the experientially remote, and from tasks requiring simple thought processes to those requiring abstract and formal reasoning.

5. To be fully productive, learning should be incremental. As the child goes through the curriculum, he should not only be able to deal with new content but he should also acquire an increased capacity to think and to perform those skills that assist him in his intellectual tasks. For example, it is important that students not only extend their capacity to make distinctions but also to make finer distinctions as they move through the curriculum, and their capacity to synthesize should not only be extended to a greater variety of content ideas but the syntheses should themselves become more inclusive. Such increments should characterize all lines of growth—knowledge; thinking; and attitudes, feelings, and values. Each step in learning ought to demand a bit more than did the preceding one. Each increment needs to be sufficiently beyond what the students can do at a given time to challenge them, yet not so far beyond their current skills as to render them incapable of making the leap.

6. Learning activities that challenge students to apply what they have learned in one context to a new context should be spaced throughout the curriculum. A continuous effort to apply what is known to explain something new, to predict, and to hypothesize will develop habits and learning sets in school that permit an individual to continue learning beyond school.

7. Learning activities, especially those involving intellectual skills, are of two kinds. One represents intake of new information which is organized, interpreted, and expressed by means of concepts already acquired. The

other kind is a learning activity which challenges the student with cognitive dissonances—an activity which does not fit the student's existing conceptual system. To put this another way—developmental sequence of learning activities provides for activities of two kinds: (a) learning activities which represent the intake of new information and the relating or fitting in of that information to existing concepts, and (b) learning activities which require students to reorganize or add a new dimension to what has been already learned. For instance, learning some important characteristics of the Eskimo hunter's way of life as he interacts with his environment represents new information. Examining the somewhat different activities of the Lap herder as he interacts with his environment and predicting whether the Eskimo might adopt the herder's way of life provides a situation which requires the child to reorganize his thinking. To take a different kind of example—a class that has reached conclusions based on their study of literacy campaigns in Latin America will, if they are faced with a markedly different set of conclusions from a newspaper or magazine article, have to reorganize their viewpoints.

The two processes described here have been called "assimilation" and "accommodation" by Piaget.

8. In order to develop autonomy of thought, students need opportunities to organize their own conceptual systems and to develop their skills for independent processing of information. Consequently, the nature and the organization of learning activities should be calculated to encourage the learner to inquire, to do his own thinking, to develop his own ways of working out problems, and to try out and to evaluate his own ideas. Despite the temptation to provide the answers and solutions, the teacher must accord the learner the right to come to grips with the learning process, even though the products may be less refined than the teacher would wish. The point here is that even though imposed ideas may look more tidy, they are less likely to fit a child's conceptual system than those he has thought through to himself.

9. It is imperative to recognize that students learn in multiple ways. They need opportunities therefore to learn from books, from observation, from analysis, and from discussion and reflection. Presumably at a particular point in time there is also an optimal way of learning for each individual. Since we know little about diagnosing individual optimal ways of learning, the activities should provide for variety in both process and materials so no individual is deprived either of his only possible way of learning or of his best way of learning.

In general, far more time seems to be spent in classrooms on activities which provide for intake, organization, and interpretation of content than on the expressive activities such as making murals or dramatizing. Although easily overlooked, the expressive activities, which require application or utilization of knowledge, are often the very activities that guarantee internalization of learning and productive use of learning as opposed to mere stockpiling of information,.

10. If each learning activity is open-ended in the sense that it not only permits but also encourages responses and activities that differ in depth, in the content of the response, and in the way of thinking, the freedom and flexibility of the curriculum become apparent. For example, comparisons can be made on several levels of abstraction and sophistication. If learning activities are open-ended, they can accommodate heterogeneity in ability, in experience, and in background among students in a classroom. There is no "right" answer if students are asked what they think of as being really important in life, or to predict the consequences of a loss of market for the chief export in a one-commodity export country. Actually, divergent responses in the form of diverse hypotheses are advantageous. The learning activities in the guides to the Taba curriculum provide possibilities for a variety of levels of responses and for a variety of approaches both by classroom groups and by individuals.

CHARACTERISTICS OF LEARNING ACTIVITIES

On the basis of the criteria for productive learning, the following characteristics of learning activities were observed as the teaching guides were developed.:

1. Each activity serves specified functions.
2. Each activity is incremental in nature.
3. Each activity serves more than one objective.
4. Each sequence of activities (or unit) is arranged in sequential steps, proceeding inductively from the specific toward the main or organizing idea.
5. Each sequence of activities provides suggestions for several different ways of learning.
6. Each sequence of activities provides rotation of intake, organization, and interpretation.

FIGURE 7

Grade 1: The Family
Sequence, Content, and Function of Learning Activities

Main Idea II: Families differ in life style and role expectations.

Organizing Idea: Each family differs in the way it lives and the rules it makes for its members.

Generalizing	Conclusion: Variety in family life style	Paper dolls, original stories, arrange bulletin board
Intake, organizing information, inferring	37–41. Sharing good times/sad times	Books, filmstrips, records, discussion
Intake, generalizing	32–36. Variety in family rules	Books, unfinished stories, role-playing, discussion
Intake, inferring, developing empathy	31. Divergent behavior	Film, books, discussion
Reinforcement, generalizing	29–30. Change in rules—growing up	Story completion, discussion
Intake, inferring	28. Variety in who enforces family rules	Unfinished stories, role-playing

FIGURE 7—*continued*

1. *Functions of Learning Activities*	2. *Content of Activities*	3. *Major Activities Learning Materials*
Intake, organizing information, inferring, concept development	22–27. Variety in family roles	Discussion, pictures; discuss, draw, report, chart, give title, arrange bulletin board
Intake, reinforcement, differentiation	14–21. Family structure	Books, family album; read, discuss, diagram; pupil-response cards
Reinforcement	9–13. Child's own naming etc.	Books, games, interview; organize booklet, give title
Intake, inferring feelings	8. Nurturing role of adults/ older children	Discussion, pictures; discuss
Organizing information, generalizing	6–7. Reaction to needs of new baby	Chart, tally
Intake, inferring, developing empathy	1–5. Tasks/roles in care of new baby	Read, discuss, illustrate, list
Diagnosis	Opener: What do you think the mother will do after she finishes feeding the baby?	Discussion pictures; discuss

FIGURE 8

Grade 6: Middle and South America—Societies in Transition
Sequence, Content, and Function of Learning Activities

Main Idea I: Cultures change in varying degrees when they come in contact with another culture.

Organizing Idea: Aztec and Yoruba cultures influenced and were influenced by European conquistadores.

Generalizing	Conclusion: Changes within and among cultures	
Extension of information	51–52. Church in New Spain	View film, read, discuss: film, books
Decentering	50. Change	Write
Applying generalization	49. New cultures meeting in Brazil	
Decentering	48. Changes in culture in New Spain	List, discuss, role-play
Discrimination	42–47. Colonizing New Spain	Read, develop mural or panels, chart, discuss, books
Inferring and generalizing	41. Comparison of cultures	Discussion: chart developed in Act. 32–40
Intake, organizing information	32–40. Aztec, Spanish/Portugese, Yoruba	Group research, plan exchange of information, chart, map: books, films, filmstrips

FIGURE 8—*continued*

1. *Functions of Learning Activities*	2. *Content of Activities*	3. *Major Activities Learning Materials*
Inferring, generalizing	31. Comparison of conquistadores	Discussion
Concept attainment	30. Term "Conquistadores"	Discussion
Intake, organizing information	29. Other explorers	Read, chart: books
Decentering	28. Conquest of Mexico	Dramatize: episodes from the conquest of Mexico
Extending information	21–27. Cortez and the Aztecs	View filmstrips, read, chart, write, map, list, discuss: filmstrips, books, desk maps
Intake, organizing information, inferring, applying generalization	10–20. Columbus	Read, add to timeline, view filmstrips, discuss: books, filmstrips
Recall, hypothesis, intake, organizing information, checking hypothesis	2–9. Western Hemisphere before Columbus	Read, start notebooks, discuss map, construct timeline: books, maps
Identifying feelings about differences	1. Being a member of a group	Discussion: responses from Opener, books
Assessment of information and misinformation Assessment of level of concept development	Opener: What differences from your life and surroundings would you expect to find if you went to live in Middle or South America?	Discussion: content from students own background

7. Each sequence of activities provides continuity of learning by planned successive activities which are dependent on the preceding ones and prerequisite for the next ones.
8. Each sequence promotes the three major objectives.
9. Each sequence provides opportunity for the student to apply knowledge or skills he has learned.
10. Many of the activities are open-ended, thus encouraging autonomous learning on the part of the students.

It must be noted, in conclusion, that the planning of learning activities that are adequate to implement the three areas of objectives of this curriculum is a complex task equal to the complexity of content selection and organization. It was assumed that individual teachers do not usually have time to plan an adequate sequence of new learning activities. Therefore, learning activities for an entire year's work are designated in the guides, and it is recommended that teachers using the guides for the first time follow the suggested order of learning activities. Alteration of this sequence or substitution of specific learning activities is appropriate, however, once a teacher has become fully aware of the function of each learning activity.

Figures 7 and 8 illustrate for two grades several of the characteristics of learning activities described in this chapter. They show schematically sequences of learning activities for developing two main ideas in grades 1 and 6 respectively. The three columns outline the functions of the learning activities and the means of learning.

THE TEACHING GUIDE

Generally, the year's program for each grade level deals with materials that have a thematic coherence, such as a comparison of communities across the world. The themes in the Taba social studies curriculum are:

Grade 1. How children learn the rules and expectations of a society with emphasis on the family

Grade 2. How people secure the services they need through a study of contrasting communities

Grade 3. How people with differing traditions and environments meet their needs with focus on four communities of different cultural and physical environments

Grade 4. How the people of the local state have dealt with its resources and met its problems both in the past and the present

Grade 5. How the societies of the United States and Canada have emerged as modern nations through the contributions of their many groups of people—the influences that have contributed to change within them

Grade 6. How the societies of Middle and South America have evolved through the contributions of people from several continents and the change from agricultural to industrial societies

Grade 7. How man affects and is affected by the physical and social environment in which he lives with focus on the institutions he creates to help to meet his needs

Grade 8. How the society of the United States has modified its institutions and changed its role to deal with new situations

The year's work is divided into several units, each of which focuses on a single main idea and each of which relates to the year's theme. While each unit is a complete entity, it is important to follow the designated order for the units so that the proper sequence of learning activities is maintained. However, the needs of a particular class may necessitate the addition or deletion of some activities if slower or faster pacing is considered desirable. The units deal with three levels of content—the key concepts, the main and associated organizing ideas to be developed, and the specific information (the material from which students are to formulate the organizing ideas) and the main idea for each unit.

Provisions for Content

Key concepts are implicit in the development of the learning experiences for all grades. The main ideas for a year's program are listed at the beginning of each guide. Each of these main ideas is a part of a key concept and contributes to a deeper understanding of it. These ideas are from various social science disciplines and history.[1] The content to be dealt with and the dimensions to be emphasized are stated at the beginning of each unit. Because these guides are designed as teaching guides, the content statements are short outlines of the samples used to develop the main ideas.

[1] A complete listing of all main ideas in the eight-year curriculum can be found in the Appendix.

Specific content (e.g., specific cases to be examined, the dimensions of topics to be explored) is also designated through study questions, through reading assignments, and through topics for class discussion and is indicated in detail in specific learning activities (see Chart 3, page 56). Study questions are designed to direct the students to gather that information they will need to explore and to arrive at the idea with which they are dealing. For this reason most of the study questions are closed, that is, they call for particular responses. If students had no direction as to the information they should be gathering, they might well find that they had little information that would enable them to deal with the task at hand. For instance, a committee of eleven-year-olds researching the life of the Aztecs might gather information that dealt mainly with the details of human sacrifice. Thus, they would be ill-prepared to contribute information that would help the class compare the architectural and agricultural achievements of the Aztec with those of other groups of Indians. Nor would they have the necessary understanding of the several dimensions that underwent change when the Aztec came into contact with the European. Often the teaching guides suggest students be given time to read widely and freely before they choose a topic for depth study. In addition, a group of study questions often includes an open question, such as, "What else did you find about these people that you consider interesting or important?" Study questions are not numbered since data may be gathered in a variety of sequences. Discussion questions, on the other hand, are ordered and open so that the approach is logical and the interpretation of the data will reflect the thinking of the students.

Elaborations of questions and of the dimensions of topics are also contained in charts designed to summarize research and study. Chart 2 gives a presentation of the structure of content for a topic and is an attempt to show how content is organized preparatory to interpreting it and developing main ideas from it.

Content that is needed for students has been selected from a wide range of sources. The sources are listed in each guide and these listings are as extensive as the availability of materials permits. Not all are absolutely necessary nor may they all be appropriate for any one class. Alternative resources are suggested for the content that is most crucial. Again, it is worth repeating that variations from the suggested sequences of activities are to be encouraged *when* teachers are fully aware of the function of the activity in its sequence.

A curriculum which is geared toward having the students generalize presupposes a rich intake of information on those dimensions of the topic

CHART 2

Structure of Content

Area or Topic	*Main Idea*	*Sample of Cultures*	*Dimensions Studied or Study Questions*
Middle and South America	Cultures change in varying degrees when they come in contact with another culture.	Aztec Spanish Yoruba	• What are the land and the climate like where the Aztec, Spaniard, and Yoruba lived? • How did these people secure their food, clothing, and shelter? (Farming, trading, etc?) • What tools did they have? • What evidence of trade is seen? (Market places, laws, money?) • How were the people governed? • What language did they speak? • How did these people educate their children? • If there were schools, who attended? • What kinds of things did these people invent?

that are being sampled. The teacher needs particular kinds of material to use at the logical point for a unit of study. The teacher who is working with vague, generalized, or meager material, unless she is extraordinarily imaginative about providing information in a variety of forms that children can absorb, will find it very difficult to elicit the level of thinking she seeks from them. When, for example, the teaching strategy calls for having the students compare and contrast the economies of Brazil and Peru, materials that provide the raw data for such comparison are needed at that particular point. This orderly use of particular kinds of materials does place heavy demands on libraries and audio-visual departments and usually results in the purchase of multiple copies of those materials that teachers designate as being most appropriate for the curriculum.

This curriculum is best supported by those materials that are written in such a way as to leave possibilities for students to process the data; in other words materials that attempt to do the thinking for the students are not supportive of this curriculum approach. Books that are written in generalizations and film narration that draws conclusions for the students limit the number of opportunities the students have for thoughtful consideration of the data they have reviewed. The best materials are those that vividly describe in specific terms aspects of the lives of individuals. They contain a minimum of abstract terms and few, if any, editorial comments or conclusions. The abstracting, commenting, comparing, and concluding are therefore left to the students who should, intitially, at least, be given opportunities to interpret materials for themselves and to let teachers learn something of the shape of their thinking.

A variety of materials is needed to supplement those dimensions that are given a shallow treatment in many textbooks. Generally, textbooks give a wide coverage rather than a depth treatment of a few dimensions. So if teachers consider it important for the students while studying Latin America to have a depth study of an Indian culture, an African culture, and the Spanish so they can see how all three changed when they met in America, and to help the students understand what is happening today, then additional materials will be needed on these cultures. Few texts provide the students with insights into procedures in the social sciences. Too often students read about prehistorical cultures without raising the question, "How do we know these things?" Or they examine data on the standard of living in a country without asking, "How are these figures gathered?" If we wish to have the students gain some insights into the work of the archaeologist and sociologist, then materials are needed that will direct the students' attention to these scientists' ways of working and the questions they raise. By doing this students can be developing important ideas about these people and also practicing some of the thinking procedures they follow.

A depth study of a particular dimension cannot be measured by the number of books read or films viewed, but rather in the banking of information that lends itself to and justifies inferring and generalizing. Teachers should evaluate material in terms of how economically data are presented to the student. Some information may be handled more effectively in charts, graphs, or tables than by descriptive writing.

A curriculum that focuses on people requires material that highlights, through descriptions of them doing and saying things, the values and expectations of people in their relations within their social group and within their neighborhood groups. Such material is not usually found in the

regular run of textbooks. Trade books are usually recommended at an early point in the introduction of a culture so the students' attention will be directed to particular persons within the culture rather than to a faceless mass of people.

Teaching which meets the needs of all students, whether the curriculum supporting it is oriented toward an inductive or a deductive approach, must be supported by multimedia. The objective in this is to provide several ways in which students can gather information which they can share with others, and the information then becomes part of the total bank of information which the entire class uses as a basis for inferences and generalizations.

Experience has shown audio tapes to be effective with many students, and, in particular, with students who have reading problems. The listening center equipped with tapes onto which the teacher has read information, or with commercially produced records and filmstrips, provides individuals with an opportunity to gather and to contribute significant information that the rest of the class may not have. Tapes recorded on a study trip or when a resource person visits the classroom may become a reservoir of information to which the class may return as often as is necessary. If such varied means for getting information are provided, a nonreader need not be deprived of opportunity to contribute to class discussions.

The 8-mm single-concept film in a cartridge or cassette can be an effective source of information for the individual child or a small group. In evaluating this material attention should be directed toward assessing whether the clip offers a single concept or whether the clip is merely short footage from a 16-mm film offering material that is inappropriate (see above) for the stated purpose of this medium.

Teachers should evaluate carefully the visual sources of information—pictures in books, flatprints, filmstrips, and films. Are the pictures merely beautiful scenes? To what use can I put this picture? Pictures of substance covering a range of circumstances can make the teaching of the skill of picture-reading worthwhile, as it contributes to other objectives at the same time.

Lastly, both the teacher and students should be considered as sources of information. In the exchange of information, presenting data by one group is an expressive activity for that group, but it should also be an intake of information for other students. Thus, it is important that students understand the importance of sharing their information in such a way that it can be quickly utilized by the rest of the class. The teacher also often acts as a resource person and, in addition, develops rewrite charts and other materials that provide for a rich intake of information.

A Summary Statement: The Relationship of Learning Activities to Content

Each learning activity performs more than one function or serves more than one of the three objectives: *knowledge*; *thinking*; and *attitudes, feelings, and values.*

KNOWLEDGE

Generalized information from history and the social sciences, termed main ideas in this curriculum, is provided in the teaching guides. These main ideas are the organizing principles for units of study, and they provide the underlying logic for the sequencing of learning activities. The logical sequence of learning activities makes it possible for students to increase understandings gradually to a point of being able to approximate the main idea or, at least, the organizing idea, depending upon the backgrounds from which the students have to draw.

Specific learning activities are planned for the broadening of understanding of key concepts, such as interdependence.

Content that is needed for students (the data to work with) has been selected from a wide variety of sources and is designated in the learning activities.

THINKING

Activities are planned to give children practice in organizing data, in interpreting and making inferences about those data, and opportunities to apply the inferences and generalizations at which the students have arrived. As an example, the activity of making a chart of the items Indians traded and where these items were found or produced not only contributes to knowledge about the Indians but also gives practice in organizing data and forms the basis for interpreting information and for making inferences about trade.

ATTITUDES, FEELINGS, VALUES

Activities are planned to allow students to explore what might be the attitude or values of the people they are studying and to consider their own attitudes or values. For instance, in the third grade the students are asked to consider how a Bedouin of the Negev *might* feel about moving and to compare it with the variety of reactions of the class group to moving. Also, in the third grade as the students interpret the efforts of a Norwegian villager to conserve his land, the child is asked to examine how he would behave in conserving resources about him.

ACADEMIC AND SOCIAL SKILLS

The gathering of information, organization, and interpretation of data, and expression of attitudes/values require skills. Hence, within each unit are activities that provide opportunities for practice in academic and social skills, for instance, research skills, the making of graphs and charts for the presentation of data, and skills of group work as well as individual responsibility.

Not all learning activities are equally important to the sequential development of learning. Some are introduced for enrichment. A few stand more or less on their own and, not being a prerequisite for another learning activity, can be omitted should the pressure of time make it necessary. However, before a teacher decides to either eliminate or modify a learning activity, he should first examine the entire sequence to ensure that it is not a crucial link to another learning activity that follows at a later point in the sequence or that it is not information that will be crucial later in the year's program.

Gross Sequence of Learning Activities

The learning activities in each unit follow the same gross sequence: opener, development, and conclusion. The opener includes those activities necessary to prepare both the teacher and the students for the proper approach to the main idea to be developed. The opener may serve one or more important functions; it may:

1. Provide diagnostic evidence for the teacher, such as what concepts students can handle, the nature of their previous understandings and experiences, the needs and gaps in the experience of both the group and of the individuals, and assess the attitudes of the students
2. Relate the experiences of the students to the topic of the unit
3. Provide a transition from one main idea to the next
4. Provide an opportunity to practice the skills of concept development as a preparation for the development of generalizations as well as an end in itself
5. Provide an opportunity to hypothesize

The *development* section constitutes the major bulk of the unit. It consists of activities that are designed to develop various aspects of the desired learnings—to provide the needed factual material, to produce the desired academic and group skills, and to develop thinking skills, such as interpreting data and generalizing about them. This stage of the unit sequence also provides opportunities for prolonged organized study, for forming committees, and for planning ways of exchanging information. Within the

learning activities are opportunities for dealing with attitudes, feelings, and values.

The *conclusion* (see Chart 3, for an example) is not a unit culmination, nor is it a summary, in the usual sense. It serves to consolidate learnings rather than to review learnings. The concluding activities require students to apply or to synthesize learnings. At this time the students should be able to formulate some general summarizing statement. They will do this with the help of questions that direct them to gather up and relate together their thoughts on what they have studied. They will also be asked to check their conclusions against the data from which they were derived (to see if they are compatible) and sometimes against the conclusions of social scientists working with similar data. Some will have had experiences that justify their making statements that approximate the main idea rather than limiting their generalizations to the level of the organizing idea. Concluding activities also often include tasks which require students to apply what was learned to a new situation by new means of expression. Whatever its form the conclusion should ensure that learnings are internalized by the pupils.

Internal Sequence

Since the development constitutes the bulk of a unit, it includes several inductive sequences. These subsequences represent the application of the several principles of learning described earlier in this chapter and elsewhere in this *Handbook*. Usually each subsequence begins with concrete, descriptive facts and proceeds with materials and tasks which require a gradually deepening degree of abstraction.

In Chart 3, Learning Activities 1–10 illustrate a progression from the descriptive to a more analytical and abstract concept of difference in attitude as different people react to what is familiar to them. The opener begins with assessing what the students think they know about deserts and proceeds to prediction. Questions in Activity 19 (not in the Chart) introduce a more elaborate analysis of peoples' use of the desert which leads to understanding of the concept of modification. Activity 20 is designed for further development of the concept of modification through activities which reinforce and synthesize it, and is planned to keep the knowledge and skills of all people highly visible to the students at all times.

Internal Rotations

Within one unit, learning activities provide systematic rotation of intake, organization, and interpretation of information. These rotations implement the principle that productive learning requires the pupils both to learn new

information and to internalize these learnings. Pupils must analyze complex sets of facts, organize them, interpret the data, and generalize.

The opener and Learning Activities 1–10 in Chart 3 illustrate such a rotation. The opener builds on known concepts which the children already possess about the desert. The first learning activity provides an opportunity to hypothesize. The second learning activity provides for intake of new information through reading. This intake is internalized and reorganized in Activities 3 and 4. Activities 5 and 6 provide for extension of the initial concepts. This internal sequence culminates with Activity 10 when the children have generalized their learnings about the reasons people move and the feelings they may have about moving.

A significant number of activities in any unit are designed to deal with attitudes, feelings, and values. Research has shown that facts alone do not change emotions. Personal experiences that affect emotions are needed early in a child's encounter with a culture that differs from his own. After this, facts are helpful. Therefore, the learning plan provides activities designed to develop feelings and to supply the supportive facts. In handling feelings, the first step is to provide for identification with individuals in the setting to be considered. This may be accomplished by providing for recall of personal experiences, by reading stories, or by showing appropriate films. For example, Activity 2 on Chart 3 is designed to introduce a character, Fayez, whose way of life differs from the students', but with whom experience has indicated most children will identify. They seem to like him as a person. However, it takes time to change feelings. Teachers using the guides will notice that follow-up activities which focus on and examine feelings appear at points throughout the unit and the year's program.

SUMMARY

If learning is to be both effective and efficient, it must come in bite-sized increments. Such increments can achieve their "bite" size both by the pace that is set by the students and teacher and by the skill of the curriculum developer who determines the nature of the psychological distance between one question or one activity and the next. Each succeeding activity must demand a bit more than did the preceding one. While each step must be challenging, it must also be within the reach of the students. For example, in Chart 3, Learning Activity 7 organizes the information about the reasons different groups of people moved. Activity 9 asks the students to contrast the reasons of the different groups and seeks to have them generalize with the question, "What can you say about the reasons people have for moving?" Activity 10 encourages the students to explore the feelings people may have about moving. It is this sequential arrangement of learning by bite-sized increments that makes inductive learning possible.

CHART 3

Abridged Sequence of Learning Activities (Grade 3)
(Four Communities Around the World)

Unit III

Main Idea: Interaction between a people and their physical environment influences the way in which they meet their needs.

Organizing Idea: The desert people modify their behavior and their environment in order to make a living.

Notes to the Teacher	*Learning Activities*
People everywhere have developed some patterns of living that are related to their environment. The following sequence (Opener through Activity 10) deals with the nomadic life as one way in which some desert people handle the problem of water scarcity.	
Keep the record you make of the students' statements and their papers. They will be used in the Conclusion.	*Opener* Let the children who have crossed a desert or who have seen deserts on TV or in the movies tell what they think they know about deserts. Record the statements of the students. Ask the students to write a paper on the subject: Could anyone live in the desert? Examine the papers to see whether any of the students suggest that one response to climate is for people to modify their behavior.
Formulating Hypotheses. Students should be encouraged to suggest possible explanations for or predictions in unfamiliar situations. Faulty hypotheses should not be corrected at the point at which they are given, but once additional information has been gathered, they should be checked.	*Development* 1. Display a picture of a camel caravan and ask: What reason do you suppose these people might have for moving? If no large study print is available, display *All About the Desert* (Epstein), pp. 22–23, and *The True Book of Deserts* (Posell), pp. 14–15. *All About the Desert* is not a reference for students but the illustrations are useful.

CHART 3—*continued*

Notes to the Teacher	*Learning Activities*
Keep the record of the reasons for the journeys of the nomad. The children will check it in Activity 6.	Record the reasons the children offer for the journeys of the nomad.
In Activity 18 the students will be formally presented with these points as study questions to which they will seek answers in their research.	2. Read *Sons of the Desert* (Gidal) to the class as an introduction which provides some basic knowledge about the life of the Bedouin. Do not spend time on minor details. Rather, emphasize the major points which will be used for comparing the life of the Bedouin nomads with that of other cultures.
Intake of information	• How they get their food • How they get their housing • How they get their clothing • What tools they use • How they travel from place to place • How they get their water
Map skills	3. Using the map in the front fly leaf of *Sons of the Desert* (Gidal), help the children locate the travels of the characters in the story.
Since the emphasis of this unit is on the Bedouin of the Middle Eastern deserts, the other desert areas of the world will not be identified until Activity 28.	4. Have the children locate the deserts of the Middle East on the world map started in Unit I. Have the students relate the location of the deserts of the Middle East to the location of Hudson Bay area where the Central Eskimo lives. Ask: In what direction are the deserts from the Arctic?
Evaluation procedures described in Unit I, Activity 6 (located following Optional Activity 8), could be used here.	
Encourage students to raise questions	5. Tell the children they are going to see a filmstrip about desert nomads. Ask: What ideas do you think are important to watch for?

CHART 3—*continued*

Main Idea: Interaction between a people and their physical environment influences the way in which they meet their needs.

Organizing Idea: The desert people modify their behavior and their environment in order to make a living.

Notes to the Teacher	*Learning Activities*
	Many of the ideas eight-year olds will give will be quite specific. A few children will reach a higher level of abstraction. Note the range of these typical third grade responses: • Whether they have tents • Who gets to eat first at mealtime • What rules they have • The way they make a living Show the filmstrip *Ahmed and Adah of the Desert Lands.* If the filmstrip is not available, read "Tent People" from *At Home Around the World* (Goetz), pp. 135–138. As further intake of information read *Achmed, Boy of the Negev* (Russcol).
It is important that children learn to check their hypotheses once they have more information. It is equally important for them to learn that frequently there is more than one cause for an event.	6. Ask the children: • Why did Fayez in *Sons of the Desert* (Gidal) move? • What reason did the people we just learned about (in Activity 5) have for moving? Refer again to the pictures shown and the record of reasons for the journeys of the nomad from Activity 1. Have the children check their hypotheses at this time. Ask: 1) Were the reasons correct that you gave as to why these people might be moving? 2) Do you have any additional reasons to add now?
Do not put a title on the chart, as that will be an essential part of Activity 8. Recall of information	7. Develop on the chalkboard a chart of reasons for moving. Help the children recall the reasons the Eskimo hunter moved and the reasons the desert nomad moves. Add to the chart a list of reasons the children think their own parents have had for moving. For example:

CHART 3—*continued*

Notes to the Teacher	*Learning Activities*

Organizing information

Desert Nomad	*Eskimo Hunter*	*Our Family*
The search for water	They go where hunting is good	Daddy has a new job
They travel to better pastures	They travel to trading posts	We need a bigger home

OR

The children will produce better results if they work on the assignment in pairs and then share their products.

Let the children work in pairs for a few minutes, listing reasons for the moves of either the Eskimo hunter or the desert nomad. Then let each pair meet with another pair and combine their lists. They may select one person to report for the group. After the contributions have been charted on the chalkboard, let the whole class give reasons their own families, or families they know, move.

Evaluation procedures described in Unit I, Activity 28 (located following that activity).

8. Have the students suggest a title for the chart. If you wish to use this exercise to evaluate their work, ask each to write out his own title for the chart and turn it in.

It is usually easier for children to see differences than for them to see similarities.

Inferring and Generalizing

9. Have the children contrast the reasons the different groups of people have for moving. Encourage them to refer to the chart (Activity 7).

   Suggested question sequence:

   1) What differences do you see in the reasons that these three groups of people have for moving?
   2) Why do you suppose there are these differences?
   3) How are people's reasons for moving alike?
   4) What can you say about the reasons people move?

   If there are many more reasons listed under "Our Family" than in the other two columns, ask the children why they think there are. It may lead to the idea that we know more about ourselves than we do about others.

One important realization the children may reach is that different people may feel differently about a similar event.

10. Let the children explore the way people might feel about moving. They should understand that it is the nomad's way of life to change his camp, and that nomad children get quite excited about the prospect of another move.

CHART 3—*continued*

Main Idea: Interaction between a people and their physical environment influences the way in which they meet their needs.

Organizing Idea: The desert people modify their behavior and their environment in order to make a living.

Notes to the Teacher	*Learning Activities*
	Our feelings *might* be different because our way of life differs.
Attitudes, Feelings, and Values The purpose of this activity is to increase children's awareness that what seems strange to one person may seem rational to another.	Suggested question sequence: 1) How do you think Fayez felt when his father told the family they would move on the next day? 2) Why do you suppose he felt that way? 3) What other way might he have felt? 4) How do you think his father or mother felt? 5) Have you ever moved? 6) How did you feel when you moved? 7) Why do you think you feel the way you do about moving? 8) What does this tell you about people?
	Activities 11–36 deal with the physical environment of the Negev, modifications the Bedouin makes in his environment, and additional modifications he makes in his behavior.
	Conclusion Put the diagram shown below on the chalkboard. Tell the children that the arrows mean "have something to do with."
The pupil-response cards should have the same response written on both sides of the cards, so the children may read it as they hold it up for the teacher to read.	Have each child make two pupil-response cards (preferably of different colors), one saying "With People" and the other saying "Without People." Tell the children they are to decide whether the events listed would happen without people or whether they would happen only if people were there. Then when you read the items each child is to hold up the card that says what he thinks, and you will tally their responses.

CHART 3—*continued*

Notes to the Teacher	*Learning Activities*

			With People	*Without People*
Water Trees	(have something to do with) →	An oasis		
Heavy rainfall Hard dry earth	→	Floods		
Little rainfall Need for water	→	Wells		
Herds of camels Herds of goats	→	Items sold in the market		
Strong winds Sand Hot air	(have something to do with) →	Long, loose robes		
Water Good soil	→	Farming		

After the exercise has been completed ask:

Inferring and Generalizing

What ideas do you get from what you see?

Continue questioning until the children have had an opportunity to make a number of statements about the nomad's relationship to his environment.

Checking an inference

Direct the student's attention to their mural. Let them point out the number of items they would have to remove if there were no people in the desert.

If students are asked to rewrite their papers, analysis of first and second attempts using at least some of the criteria described in Unit I, Activities 21 and 35, can be extremely valuable in *evaluating* growth on the part of individuals and the total class.

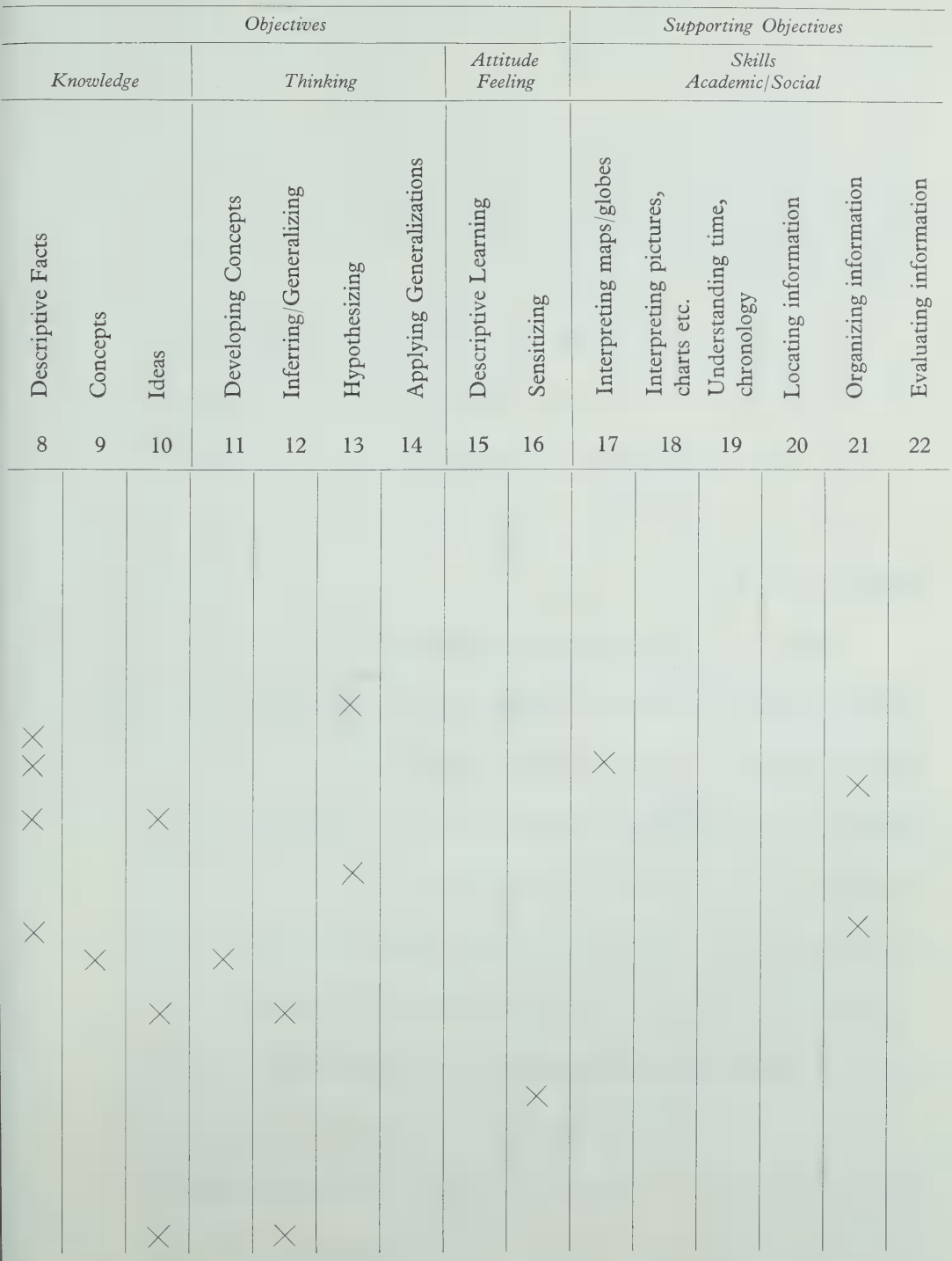
Display the record made in the Opener of the children's ideas about deserts. Also give each student his paper written in the Opener. Ask how many have changed their minds about what they wrote or thought they knew and now could do a better job.

CHART 4

The Nature and Function of Learning Activities

	Means				*Rotations*		
Main Idea III: Grade 3 Interaction between a people and their physical environment influences the way in which they meet their needs. *Organizing idea:* The desert people modify their behavior and their environment in order to make a living.	Doing/Dramatizing 1	Looking/Listening 2	Talking/Reading 3	Writing 4	Intake 5	Organization 6	Inferring/Generalizing 7
Opener: Could anyone live in the desert?			X	X			
1. What reason do you suppose these people have for moving?		X	X				
2. Read			X		X		
3. Read map					X		
4. Enter deserts on map	X					X	
5. View filmstrip/read		X	X		X		
6. Check hypothesis (No. 1)			X				
7. Chart reasons for moving			X			X	
8. Give title to chart			X				
9. Contrast reasons for moving			X				X
10. Way the nomad might feel about moving			X				
Conclusions: Interaction between people and desert. Check Opener	X		X				X

(A Graphic Presentation of the Learning Activities from Chart 3)



Chapter 5 TEACHING STRATEGIES AND PROCEDURES

INTRODUCTION

In this chapter a distinction is made between strategies, minor strategies, and procedures. Without it there is likely to be some confusion between, on the one hand, a particular teaching strategy which in this curriculum is intended to be and which has research to support its being applied in a basically stable form over a wide range of teachers, grades, teaching situations, students and content; and on the other hand, a procedure which can, and in fact should, be modified according to the style and circumstances of a particular teacher, or the size, socio-economic status, age and experience of a class and the particular content and learning activities involved.

In making such a distinction between these two basic methods of meeting social studies objectives, we do not imply that a rigid and unyielding barrier should exist between them. For, clearly, there must be *some* modification of teaching strategies according to feedback from an individual or a group, just as there will also be many basic similarities in the application of a particular procedure over a wide range of circumstances. Probably the most significant point that is made about teaching strategies in this chapter is that they are widely applicable, and that if their basic form is maintained, there is likely to be a marked improvement in the thinking skills of elementary school students as they study social topics and apply the knowledge they gain to other aspects of their lives.

There are seven major strategies that have been incorporated in the latest form of the Taba Curriculum. One is for *developing concepts*; one for *attaining concepts*; one for *interpreting*, *inferring*, and *generalizing* about *tangible aspects of behavior*, and three for the less tangible but no less im-

portant *affective elements of behavior*; and finally one for *applying generalizations in new situations*. They are considered major because of their key role in enhancing the development of thinking skills throughout the curriculum. The slight modifications that need to be made from time to time to adapt them to different classroom circumstances will be made largely on the basis of a pacing principle. This simply means that some will take less time to deal with in some circumstances than they will in others, but that their basic form will remain relatively unchanged if they are to perform the functions intended for them.

There are also four minor strategies which, while no less important in their role of developing thinking skills, are much less complex in structure. These are concerned with *repeating students' responses*, *rephrasing responses*, *asking for explanations of predictions*, and *asking for explanations of high-level responses*.

The other forms of teaching behavior which in this curriculum are called procedures cover the translation of content into learnable tasks, discussion procedures, and the formulation of hypotheses.

The strategies and procedures described here are considered crucial in the development of transferable thinking skills and for the acquisition and proper modification of knowledge and attitudes. Their origins lie in the theory and associated research of Piaget, Vygotsky, Sigel, and Taba, and the research associated with the Eight Year Study of the University of Chicago and the Taba Curriculum Development Project at San Francisco State College.

These strategies and procedures together are designed to provide a firm basis for the development of cognitive skills. Such skills will arise from a dynamic interaction between the student and the stimulation he receives from well-phrased and carefully sequenced questions, from interesting and socially significant content, and from the kind of classroom climate which encourages free-ranging and uninhibited responses at all times.

MAJOR STRATEGIES

Developing Concepts

This strategy is aimed at establishing a firm basis for the later development of well-understood generalizations. The concepts talked about here are the building blocks for these generalizations. In that form they are akin to the concepts discussed by Gagné (1966) and therefore to be distinguished from the Key Concepts discussed in Chapters 2 and 3, largely because the concepts discussed in this strategy are part of a process which assists and usually precedes the development of generalizations. They are therefore less

abstract and inclusive than Key Concepts which are highly abstract labels, each of which heads a group of sentence generalizations.[1]

The essential steps of this strategy are first of all to have students identify a number of concrete items they find in their experience—be it a visit they have had, a story they have read or listened to, a film strip or slides they have seen. When a suitably (usually determined by the teacher) large and diverse list of items is produced, the students are then asked to group the items that belong together and to give suitable (usually determined by the students) reasons for so doing, to then label their groups, and finally to rearrange and relabel them if they see other ways they might be grouped.

As illustrated by Chart 5, the teaching strategy consists of sequentially ordered questions which are designed to elicit a specific sequence of overt activities from the students.

On the basis of research and theory (see Chapter 2) it can be argued that certain mental operations are the necessary ingredients for the development of particular thinking skills. The order in which these operations must be learned suggests the sequences of overt activities to be followed by the student and, therefore, the sequence of eliciting questions for the teacher.

Concepts of the kind discussed here are formed therefore as students respond to questions that require them:

1. to enumerate items
2. to find a basis for grouping items that are similar in some respect
3. to identify the common characteristics of items in a group, and so label the groups and, if necessary, to subsume other items they have enumerated under those labels,
4. to regroup and relabel items as they see ways in which this could be done, and
5. to summarize the information before them into one sentence.[2] In this process they must differentiate the various items from one another, decide as they group what the categories are to be, and which items are larger (usually labels) and which are smaller (or what is superordinate and what is subordinate).

---

[1] For example, the Key Concept, *Interaction*, could be regarded as a label for a group of sentence generalizations which might include as examples: "As man interacts with his physical and social environment both he and his environment are changed." "Interaction within and between groups may be expressed as cooperation, competition, or conflict, etc." See Chapter 3 for a description of Key Concepts.

[2] This last step may be omitted at this point and instead included as a part of the strategy concerned with the interpretation of data.

CHART 5

Developing Concepts

Teacher	*Student*	*Teacher follow through*
What do you see (notice, find) here?	Gives items.	Makes sure items are accessible to each student. For example: Chalkboard Transparency Individual list Pictures Item card
Do any of these items seem to belong together?	Finds some similarity as a basis for grouping items.	Communicates grouping. For example: Underlines in colored chalk. Marks with symbols. Arranges pictures or cards.
Why would you group them together?*	Identifies and verbalizes the common characteristics of items in a group.	Seeks clarification of responses when necessary.
What would you call these groups you have formed?	Verbalizes a label (perhaps more than one word) that appropriately encompasses all items.	Records.
Could some of these belong in more than one group?	States different relationships.	Records.
Can we put these same items in different groups?† Why would you group them that way?	States additional different relationships.	Communicates grouping.
Can someone say in one sentence something about all these groups?‡	Offers a suitable summary sentence.	Reminds them, if necessary, to take into consideration *all* the groups before them.

* Sometimes you ask the same child "why" when he offers the grouping, and other times you may wish to get many groups before considering "why" things are grouped together.

†Although this step is important because it encourages flexibility, it will not be appropriate on all occasions.

‡ This step is often omitted because as a generalizing activity it may be reserved for the next strategy.

Each one of these steps in concept formation is a necessary prerequisite for the next one. Categorizing and labeling cannot take place without prior grouping, and the attendant discovery of what belongs together. Before grouping can take place, there must be listings of items to group and a basis on which to group them. What has been said here about the necessity for the steps should not be interpreted as imposing a uniform pace upon the strategy. This will vary according to such factors as the familiarity of students with the particular content and the practice they have had with this kind of procedure. In some cases, the grouping and labeling may have occurred in a prior lesson (or series of lessons) and hence a subsequent lesson may therefore be concerned with having the students engage in a regrouping and relabeling exercise. In other cases, the particular learning activity which provides the items may be one which was not specifically designed as an in-class activity but instead is known to have been a part of the students' past activities. On other occasions it may be necessary to have the class return to the concept development steps, particularly if they have unsuccessfully attempted a summary sentence for a particular experience.

The opener of each unit usually provides the first experience in concept formation for that unit. The questions in the opener often call for listings of various sorts. For example, an opener at the fourth-grade level is: "In what ways do people use the land we saw in our walk today?" At the sixth-grade level the question. "What differences would you expect to find if you went to live in Middle or South America?" is used as an opener. The beginnings of thinking skills developed during the opener are then reinforced and developed in subsequent learning activities.

The question "Do you see some things that belong together?" is intended to elicit grouping. Such questions will generally produce different kinds of groupings depending in part on the maturity and experience of the class. For example, the above question was applied to a list of items second-grade pupils thought would be found in a grocery store. Second graders will tend not to give class-type (see Chapter 7 for a discussion of different kinds of grouping) groupings exclusively, such as "Groceries" and "Canned Goods." Rather, they will produce some that are of a more functional kind such as "peaches and ice cream" or "potatoes and carrots" because they are eaten together.

Such groupings are neither right nor wrong, but merely reveal that children are operating at the functional level. As illustrated by the above examples, they have experienced food in this way. They put together what happens together in their experience. This is rather typical of first and second

graders before they have had directed experience with grouping and labeling, and before they become less inclined to be interested solely in what has happened to them. At the sixth-grade level, the pupils will use objective, class-type categories more freely and often will suggest in the course of listing that some items be placed together. They will also tend to produce fewer of what can be called mixed groups (putting items together in one way to start with and then switching to another way part way through). They will also be more inclined than children in the lower grade to suggest alternative ways of grouping and labeling.

In all cases it is important that the students perform the operations for themselves, see the relationships between items in their own way, figure out a basis on which to group items, and devise the categories or labels for the groups. The teacher should not do any of these things for them, although on rare occasions she might, if other methods fail, offer an alternative way of grouping items or even suggest that a list of items be extended. The important thing to aim for is a climate in which the teacher's suggestion is given no more status than that of the students' but is simply offered as another alternative to be considered. As far as the teacher is concerned, any stimulus that is given is to help students move as far as their current level of thinking will allow them.

It is also important for the students to discover that any item has many different characteristics and can therefore be grouped in many different ways (Sigel *et al.*, 1967). Each one of the multiple characteristics which items possess can be used as a basis for grouping. In the course of grouping items, the students' suggestions and questions will reveal how sharply relationships are perceived. For example, a sixth grader's question, "Will we put different foods under production or under standard of living?," revealed his awareness of multiple grouping. It raised the possiblility of including the same item in several groups and under several labels. For, if food is considered in terms of raising and processing, it can be placed under the category of production. If considered in terms of abundance or variation in diet, food can be categorized under standard of living.

The primary basis for the question sequence used in this strategy, and for the particular style of question, lies partly in the work of Paiget, Smedslund, and Vygotsky, and partly in the research on concept formation conducted by Bruner, Goodnow, and Austin. In essence, Piaget (1964) claims that cognitive development is dependent on the interaction of four factors, namely, *maturation* (development will not occur until the child has reached an appropriate level of physiological and neurological maturation), *social interaction* (support and stimulation from the reactions of people around

him to his behavior), *equilibration* (the balancing effect of what he perceives and experiences on already established structures), and *experience* (opportunities to experiment with and, in his own way, learn from the things he experiences through his senses). The particular character of the experience Piaget talks about is contained in the strategy for concept development described here since it provides a structured teaching and learning sequence but places no specific restrictions or structures on the kinds of responses which students give. At the point where a teacher pressures for specific kinds of responses through explicit statements or signs (acceptance, disapproval, etc.) the strategy becomes a different one from that described here and therefore is at variance with the principles contained in Piaget's definition of the need of experience which will best contribute to cognitive development.

When a student is given the opportunity to regroup and relabel the listed items he is able to both demonstrate and practice flexibility, a quality which Sigel *et al.* (1965) and Smedslund (1967) claim to be an important ingredient in cognitive development. In Social Studies this quality has particular relevance in breaking down ethnocentrism.

In most cases, the concepts so formed will not be new to individual students for they will have used each concept label before in some form or another and therefore have known at least some of its components. But, by going through this process the dimensions of the concept will become enlarged and its meaning precisely delineated. In addition, by organizing discrete items of experience in this way students are readying themselves for a more perceptive and pervasive look at that experience.

Attaining Concepts

This strategy derives from a wide range of research on the teaching of specific concepts which may be in the form of, for example, geometric symbols (a student learns to respond to the red triangle) or shapes (the small blue disk), or a particular word label for a characteristic that a number of different items have in common (slave, or herder, or colonist).

The principal difference between this strategy and the preceding one lies in the degree of control exercised over the outcome. The concept labels which students give the groups in a concept development exercise are their own. They label a group of items in the most appropriate way they can devise, given their experience with those particular items, their cognitive style, and the pool of words on which they can draw. In the case of concept attainment, they are first given a concept word to say and to recognize in its printed form and are then presented with a wide range of

CHART 6

Attaining Concepts

Teacher	*Student*	*Teacher follow through*
1. Say this word after me . . .	Repeats word.	Makes sure the word is pronounced correctly.
2. This is an . . .	Looks at object, listens to description given, or reads statements which are illustrative examples of the concept.	Checks for any who may not be able to see or hear.
3. This is also an . . .		
4. This is *not* an . . .	Looks at new object, or listens to new description, or reads statements which are not samples of the concept (but which may be similar, in similar form, etc.)	Checks again.
5. Show me an . . . or Tell me what you think an . . . is or Which of these describes an . . . or Is this an . . .	Points to object. Defines the concept. Selects from one or more descriptions.	Shows additional objects or gives fresh descriptions to test. Has students write down their definitions.
6. Asks: How then would you define an . . .	Gives summary generalization (definition) of concept.	Checks for accuracy.

examples of it, followed in due course, by some non-examples. They are then tested by being asked to identify an example of the concept among a mixed group of examples and non-examples. In both of these strategies involving concepts, students are expected to discover relationships among a group of items but in one (concept formation) the selection is student con-

trolled, in the sense that students group according to their own judgment about what goes together and how the groups they thus form should be labeled, whereas in the other (concept attainment) the teacher provides the label and the students' task is to discover what common element (or elements) links (or link) together the various objects that are called by the same name.

The concept attainment strategy often used at that point in a unit where some common word meanings a necessary prerequisites for the clear differentiation of ways of living, attitud , aspirations, and the like. For example, fifth graders probably need to have a precise understanding of *colonist* in order to understand some of the attitudes such a person held toward his new home and his faraway rulers. A clear distinction between herders and nonherders is probably necessary for a third grader's understanding of important aspects of Eskimo life.

In some cases it will be desirable to use the next-to-last step of the above strategy first so as to check on the degree of precision with which children identify examples of a concept to which they already respond. Once this check has been given a teacher can decide whether or not it is necessary to go back to Steps 2, 3, and 4 of Chart 6 in order to refine meanings, and thereby to use the total strategy with them.

These strategies on concept development and concept attainment should provide students with opportunities to ponder each experience and systematically to establish a firm basis for deepening their understanding of the concepts they form and acquire. The next step in this process is usually that of having them examine the different patterns of relationships among the concepts they now have, to make statements about them in the form of generalizations which may themselves be categorized as either interpretations or inferences.

Developing Generalizations

Generalizations, like concepts, are the end products of a process of an individual's abstracting from a group of items of his experience those elements or characteristics the items share, and expressing his recognition of this commonality in a way that is convincing to others. The two major differences between concepts and generalizations are, first of all, that in generalizations the verbal form of this process is expressed as a sentence rather than a word or phrase as in the case of concepts, and second, that generalizations are here taken as representing a higher level of thinking than

concepts in that they are a statement of relationships among two or more of these concepts.[3]

For purposes of clarity, a distinction is made in this curriculum between a generalization which is an interpretation or a conclusion, and that which is an inference. An interpretation or a conclusion is defined as a statement of relationships among given data (usually that which has just been read, seen or heard and then processed in a concept development exercise). In this case the teacher may say: "Now, looking at the groups we have made here, can anyone say something that sums them all up?" This process may even be taken a step further to the point where the summing up may be of two or more conclusions derived from two or more separate sets of experiences, as, for example, when a fourth grade class is asked to reach one set of conclusions about the way Indians used the land and another about the way the Spanish settlers used it. They would then be asked to compare the two uses of land. In this case, the teacher would say something like, "We have said this about these people, and you will remember we said this (or these things) about these other people. Now, can anyone sum up in one sentence what both these statements are about?" The resulting sentence generalizations would be higher-level conclusions than the original ones about each group, but since they are still derived from data available to the whole class from their common experiences, they may still be called conclusions or interpretations.

An inference, on the other hand, is here defined as a generalization that again is an expression of relationships among data, some of which come from previous experience, often of a personal nature, but in this case, one which goes beyond given data to encompass a wider set of relationships. A student who makes an inference which is in the form of a judgment about the connection between the concerns of the people of another culture and his own does so on the basis of a shared examination of people from another place and his own personal assessment of an aspect of his own life. A student who spontaneously infers meanings of this kind is demonstrating a level of thinking which is highly appropriate to the kind of social studies advocated in this curriculum. If such inferences are not made spontaneously by students, then the teacher should see to it that children are encouraged to take steps that have them thinking about that which is related to but goes beyond the given and the particular cultures and people being studied. By so doing teachers will lead students toward piecing together the kinds of

---

[3] They are therefore synonymous with what Gagné calls *principles*. Note that the concepts which contribute to the development of generalizations are different from the Key Concepts discussed in the previous chapter.

generalizations expressed in the main ideas of this curriculum. It can therefore be seen how important inferencing is in this curriculum. If students do not go beyond that which is directly given they will not be attaining what is at the heart of this curriculum, namely, important ideas about human behavior. Too often this is the case. Students therefore learn a good deal about another culture but they fail to move to the point of considering what they can learn from this study about human behavior in general. To omit this step is to leave out the punch line of social studies activities and to make of these activities a travesty of the real thing.

The elements of this particular strategy are shown in Chart 7. The task involves three main steps:

1. Looking at similar aspects of selected samples with the same questions in mind for each. (For example: "What are the educational patterns in Brazil, in Mexico, and in Bolivia?")
2. Explaining what is seen, such as comparing and contrasting the different literacy levels in two countries and explaining similarities and differences.
3. Arriving at generalizations by interpreting meaning from the similarities and the differences identified in step 2 (in the above example, regarding the educational patterns).

This task is a complex one because in considering each sample (for example, education in Brazil, Mexico, and Bolivia), the pupils will have to make interpretations as to what the basic elements in the educational patterns in each country are, generalize about them, and finally, make new generalizations by comparing and contrasting the generalizations about each country. Only then can the students develop over-arching generalizations (generalizations of generalizations) regarding education in Latin America. (See model for such a comparison in Figure 3.) They may then spontaneously or after careful guidance compare their interpretations with other aspects of human behavior they know about and make inferences about man and his ways and in so doing move closer to the generalization expressed in the main idea.

This curriculum offers a variety of learning activities in which interpreting data and inferring from them are required, such as reading, viewing films, observing, and interrelating research data which have been assembled by several student committees. Not all of the learning activities involve comparisons. Most, however, require the capacity to identify key points in data, to differentiate the relevant from the irrelevant, to discern cause and effect relationships, and to generalize. Many of these activities will

follow immediately on a concept development activity but in cases where the concepts are already well understood the concept development step may not be necessary.

The most difficult part in learning to make interpretations of this kind lies in the fact that pupils often have had years of conditioning against abstracting important ideas from what is contained in the printed page. Because they have been trained to settle for specific answers, they have no model for interpreting and inferring. However, with practice and with help, students can learn to "work" with facts and to make interpretations and inferences which are recognized as reasonable within the confines of the data at their disposal.

CHART 7

Developing Generalizations

Teacher	*Student*	*Teacher follow through*
What did you notice? See? Find? What differences did you notice (with reference to a particular question)?	Gives items.	Makes sure items are accessible. For example: Chalkboard Transparency Individual list Pictures Item card Chooses the items to pursue.
Why do you think this happened? or How do you account for these differences?	Gives explanation which may be based on factual information and/or inferences.	Accepts explanation. Seeks clarification if necessary.
What does this tell you about . . . (e.g. the way people behave)?	Gives generalization.	Encourages variety of generalizations, especially those of inference type, and seeks clarification where necessary.

This pattern of inviting reasons to account for observed phenomena and generalizing beyond the data is repeated and expanded to include more and more aspects of the data and to reach more abstract generalizations.

It is impossible to interpret data without bringing prior knowledge to bear upon the data that one is interpreting. Such prior knowledge has a conceptual organization of some kind which affects the interpretation of new data and can enrich as well as distort inferences. For example, in the study of another culture the pupils always have a second example in mind—their own culture. This projection of one's own culture onto a foreign culture (ethnocentricity) is an example of the use of an existing conceptual organization to interpret new data. It is a step toward eliminating prejudice when students recognize how readily they assume that people of other cultures are like themselves, or, if not, that others must be necessarily worse off than they are. When students objectively compare aspects of other cultures with their own in order to learn more about themselves, a giant step has been taken toward attaining one of the key objectives of social studies.

Generalizations and the generalizing process are among the most important elements in this curriculum. Every opportunity that offers should therefore be used to have students generalize about the material they are examining in their social studies work and to relate these generalizations to other shared and personal experiences. Given the opportunity to generalize in an atmosphere in which interpretations and inferences are freely encouraged without risk of censure for "wrong" answers, students will be likely to start thinking about the relationships among various elements of their everday experience and the meanings embedded in them. If, in addition, they are encouraged to check interpretations and inferences against hard data to qualify their generalizations appropriately, and to show through the tentativeness of their statements how clearly they recognize the limitations of the data they have studied, then their interpretations and inferences, and the processes associated with them, will be consonant with the purposes of this curriculum. Without these steps being taken, social studies can become an oversimplified listing of answers rather than a rigorous and never-ending search for them.

Generalizing about Attitudes, Values, and Feelings

There are many occasions in this curriculum when students will be asked to interpret the feelings and attitudes of others from different kinds of materials and to make generalizations about these experiences. The teaching strategy associated with this process is substantially the same as the previous one but, for reasons outlined below, the differences are sufficiently important to warrant detailed and separate consideration.

In the first place, a frontal approach to the task of exploring the nature of a person's feelings about a particular issue or topic is not always the most profitable way to proceed. This is particularly so in certain sensitive areas of some importance to an individual because of a likely reluctance to reveal feelings to anyone (and particularly authority figures such as teachers) who might be critical or in some way surprised or upset about what is said. Since social studies are concerned with exploring people's values, attitudes, and feelings toward important topics and issues, there is a need for specific advice about suitable ways of doing this.

The three strategies given here on this topic are designed to provide students with practice in:

1. exploring feelings—their own and others',
2. considering various approaches to solving disputes among persons and groups, and
3. analyzing the values held by people including themselves. A fourth section has some examples from the curriculum of strategies concerning feelings, attitudes, and values.

The overlap among these strategies and the cognitive strategies is understandable since it is to be hoped that cognitive skills will be applied to affective concerns as well and that emotions will enter into cognitive performance. Their separation here is for purposes of emphasis.

1. Exploring Feelings. In this strategy (described in Chart 8) students are encouraged to:

- Make inferences as to how other people feel and why
- Recognize the variety of possible emotional reactions to a given circumstance
- Relate what happens to other persons (or groups) to emotional experiences they themselves have had
- Explore reasons for their own emotional reactions
- Compare their feelings with those of others and, if appropriate, generalize to feelings of people in general.

It is anticipated that children will experience emotional reactions as they recall events in their own lives and see the parallels in them with the experiences of others. It is therefore important for the proper handling of this and the other two strategies that the teacher provide support where necessary, establish a sufficiently relaxed atmosphere for pupils to feel

CHART 8

Exploring Feelings

Students are presented with a situation involving emotional reactions on the part of one or more persons. The teaching strategy consists of asking the following questions, usually in this order.*

Teacher	*Student*	*Teacher follow through*
What happened?	Restates facts.	Sees that all facts are given and agreed upon. If students make inferences, asks that they be set aside temporarily.
How do you think . . . felt?†	Makes inference as to feelings.	Accepts inference.
Why do you think he would feel that way?	Explains.	Seeks clarification, if necessary.
Who has a different idea about how he felt?	Makes alternative inferences and explanations.	Seeks variety, if necessary. Asks for reasons, if necessary.
How did . . . (other persons in the situation) feel?	States inference about the feelings of additional persons.	Seeks clarification, if necessary. Encourages students to consider how other people in the situation felt.
Have you ever had something like this happen to you?‡	Describes similar event in his own life.	Ensures description of event.
How did you feel?†	Describes his feelings, may re-experience emotions.	Seeks clarification, if necessary. Provides support if necessary.
Why do you think you felt that way?	Offers explanation. Attempts to relate his feelings to events he has recalled.	Asks additional questions, if necessary, to get beyond stereotyped or superficial explanation.

* Sometimes only certain of the questions are asked. The teacher should omit questions if students have answered them spontaneously.

† These questions are repeated in sequence several times in order to obtain a variety of inferences and fewer personal experiences.

‡ If students have difficulty responding, you may wish to ask, "If this should happen to you, how do you think you would feel?" or "Has something like this happened to someone you know?" Another useful device is for the teacher to describe such an event in his own life.

CHART 9

Interpersonal Problem Solving

Teacher	*Student*	*Teacher follow through*
What happened? or What did . . . do?	Describes events.	Sees that all events are given. Tries to get agreement or, if not possible, a clear statement of differences in perception of what occured.
What do you think . . . (a protagonist) should do? Why?	Gives response.	Accepts response; seeks clarification where necessary.
How do you think . . . (others) would react if he did that? Why?	Makes inference and explains.	Accepts. Seeks clarification, if necessary.
Has something like that ever happened to you?*	Relates similar event in his life.	Provides support, if necessary.
What did you do?†	Relates recalled behavior.	Seeks clarification, if necessary.
As you think back now, do you think that was a good or bad thing to do?	Judges past actions.	Encourages student to judge his *own* past actions. The teacher may need to prevent others from entering the discussion at this point.
Why do you think so?	States reasons.	Accepts reasons. If necessary, asks additional questions to make clear the criteria or values which the student is using in judging his actions.
Is there anything you could have done differently?	Offers alternative behavior.	Accepts. Asks additional questions to point up inconsistencies where they occur, e.g.: "How does that agree with reasons you gave earlier?"

* If students have difficulty responding, you may wish to ask, "If this should happen to you, how do you think you would feel?" Or "Has something like this happened to someone you know?" Another useful device is for the teacher to describe such an event in his own life.

† These questions are repeated in sequence several times in order to obtain a variety of responses.

comfortable in such discussions, and be alert to the possibility of overly anxious reactions on the part of individual students.

2. Interpersonal Problem Solving. In this strategy (described in Chart 9) students are presented with a problem situation involving conflict among persons or groups (e.g., playground disputes, disagreement over traditions) and are required to:

- Propose and defend solutions
- Relate the events to similar experiences they have had
- Evaluate the way of handling the recalled problem and consider various alternatives they might have followed.

It is particularly important that students become seriously involved in the issues raised—rather than simply giving what they consider to be acceptable or "good" answers. "Good" answers are particularly likely when students are asked to evaluate their own (recalled) behavior. For this reason, it is crucial that the teacher refrain from making judgmental reactions and, on the contrary, accept the usual or antisocial response at face value and encourage the student(s) to consider its consequences, again without in any way judging actions for him (them).

One danger with this strategy is that students may tend to engage in excessive judging of their own (or others') actions without progressing to the stage of exploring the criteria and values implicit in their judgment and of considering alternatives. This tendency may be counteracted by dissuading students from judging the actions of others and by moving the discussion to succeeding questions. In due course they will be able to judge their own and other's behavior against carefully assembled criteria.

3. Analyzing Values. In this strategy (described in Chart 10) students are asked first to recall information about specified behavior on the part of an individual or group. They are then asked to explain why they think such behavior occurs. The content and questions are specific to types of behavior which clearly indicate values (e.g., "Why do you suppose they live near relatives?"). The next step requires students to infer what values are implicit in the behavior. This process is repeated for other groups or individuals. The next step requires individual students to hypothesize about their own behavior and values. The last step requires comparisons among

CHART 10

Analyzing Values

Students are asked to recall certain behaviors and to make inferences as to what values are involved, and how they differ from the values of others involved in analogous situations.*

Teacher	*Student*	*Teacher follow through*
What did they do . . . (e.g., to take care of their tools)?	Describes behavior.	Sees that description is complete and accurate.
What do you think were their reasons for doing/saying what they did?	States inferences.	Accepts. Seeks clarification, if necessary.
What do these reasons tell you about what is important to them?†	States inferences regarding values.	Restates or asks additional questions to ensure focus on values.
If you . . . (teacher specifies similar situations directly related to student, e.g., "If you accidentally tore a page in someone else's book") what would you do? Why?‡	States behavior and gives explanation.	Accepts, may seek clarification.
What does this show about what *you* think is important?	States inferences about his own values.	Accepts. Seeks clarification, if necessary.
What differences do you see in what all these people think is important?	Makes comparisons.	Ensures that all values identified are compared.

* Sometimes all questions are not asked. However, the question exploring the students' own values should *not* be omitted.

† This sequence is repeated for each group or person whose values are to be analyzed. Each group is specified by the teacher and has been previously studied.

‡ This sequence is repeated in order to get reactions from several students.

the various values which have been discussed. Thus students are encouraged to become aware of the variety of values people have and how they relate to their own values, thereby gaining more insight into those values.

It is worth stressing that these final steps in the strategy are critical ones in a curriculum which aims at helping young people to learn more of the nature and causes of human behavior. These steps have often been omitted from other curricula because of the "touchy" nature of any procedure which deals with values, and also because of the difficulties students have in handling such a complex cognitive step.

4. Examples of Strategies Concerning Feelings, Attitudes, and Values. In Grade 6 the students have read widely about Cortes and after this are asked: "What land did he claim?" "How did he use the land and people he claimed or conquered?" "What changes did he bring?" "How do you think he felt during his explorations?" "How do you think he felt about the places and people he discovered?" This would then continue along the lines suggested in Chart 8.

Later in the same Grade 6 unit it is suggested that the students work in committees to study the different reactions of various cultures to the environment in Central and South America. They are asked a number of questions, including: "How did they educate their children?" "What things did they invent, develop, or change?" "What things did they consider important?" This would be followed by a series of questions similar to those outlined in Chart 10. There is a difference, however. It is that initially the comparison of values is between cultures, probably before it turns to the student's values. Of course, the exploration of one's own values remains one of the key functions of this and similar strategies at all grades.

In Grade 1, as a part of the unit on The Family the students are shown the film, *Allen is My Brother,* and at the point where Allen is getting in the mud are asked: "What is happening in the story?" "What do you think could change the way Allen is behaving?" The rest of the film is then shown and they are then asked: "When did Allen start behaving differently from the way he did at first?" "Has anything like this ever happened to you?" "How did you feel?" It is suggested that the children be helped to see that some of them are talking about situations in which they were taking care of a younger child, while others are talking about times when they had a baby sitter. This could be done by simply listing responses on the board and reading them out for comment. ("What differences do you see in these answers?") They may then be asked: How do you think Allen will behave when he gets older?

Applying Generalizations

When students generalize from given data they are demonstrating an ability to take meaning from these data, but it is not until they show that they are able to apply such generalizations to a new situation, i.e., one that is different in form but not in substance from the ones that they have studied, that there will be evidence of the transferability of their newly found knowledge. By so doing they will be showing their grasp of the essence of the ideas they have expressed in generalized form in relation to a particular set of circumstances. And, incidentally but no less importantly, they will also be using an opportunity to practice with their newly found idea and therefore probably consolidate its meaning for themselves.

It is evident from the research of Vygotsky (1962) and Piaget (1964) that children's abilities to apply generalizations will, in part, depend on the degree of similarity between the situation from which the generalization derived in the first place and that to which it is being applied, as well as on the background of experience and maturity of the one attempting to make the bridge. Younger children will not usually be as capable as older ones of moving far away from the kinds of details originally used while still seeing connections well enough to apply the appropriate generalizations. But all should nonetheless be given opportunities for this kind of exercise and to speculate about relationships to the limits of their abilities. Too many prior assumptions about the limits of a student's ability may unnecessarily reduce his opportunities to think deeply about and with important ideas. On the other hand, teachers should remain constantly alert to signs of the kind of frustration which occurs when too much strain is put on intellectual abilities, which can kill interest and/or distort understanding. What they should keep in mind is that younger children are more likely to look for the similarities in the concrete elements of the old and the new situation than compare the new with the old on the basis of the underlying idea that the two situations share and predict outcomes accordingly. It is therefore to be expected that predictions from younger children will be more piecemeal and concrete and those of older children more encompassing and abstract.

This strategy of applying known generalizations and facts to explain unfamiliar phenomena or to predict consequences from known conditions typically occurs at the end of a sequence or a subunit at a point when students are already familiar with the facts and have developed generalizations that can be used with the questions which are required by this task. For example, if third graders know what a desert looks like, the way of life it permits, and how water affects the productivity of the soil, they have means of predicting

what might happen to the desert way of life if water became available. Or if sixth graders understand a particular one-crop economy well enough, they should be able to hypothesize about what might happen in any one-crop economy if the crop failed or became unmarketable. In essence, the students need to use what they already know, but in the conditional form (if so-and-so), in order to hypothesize about the consequences (then so-and-so).

The elements of this task and the question strategy for implementing the task are described in Chart 11. *The first step is to predict and to hypothesize.* This is usually done in response to a question, such as "What would happen to the way of life in the desert if there were sufficient water?" The setting for such a prediction may be one which is a slight variation on the theme under study, e.g., having studied deserts the students might be asked to speculate on the effects of abundant water. Or it might be a situation paralleling that which they have just studied, e.g., knowing the effects of the discovery of gold in California during the 1850's they might be able to predict what might happen if gold was discovered in Alaska. In this latter case they would have the valuable experience of later checking their predictions against what did happen and of thinking about the reasons for any discrepancies. Such discrepancies could help reinforce an appreciation of the hazards of predictions in social studies and the value of tentativeness and intellectual humility at all times.

The second step is that of explaining or supporting predictions or hypotheses by determining the causal *links the students see between the condition* (e.g., water in the desert) *and the prediction.* For example, if one predicts that the presence of water in the desert will cause cities to be built, one needs also to make explicit the chain of causal links that leads from the availability of water to the building of cities. These chains may be constructed by reasoning from concrete facts or by logical processes. One can reason that the availability of water will lead to growing crops, to discarding nomadic life, and, from there, to establishing trade and service centers. For example, one can establish a fact regarding whether or not the desert soil in question contains salt and then deduce from the established fact whether or not the availability of water will make any difference to plant life.

One can also reason deductively from the premise that the availability of water is a general condition for established life anywhere. This step is generated by questions, such as "Why would (so-and-so) happen?" or "What makes you think so?"

The third step is that of verifying the prediction or hypothesis by checking its probability and universality. This involves logical reasoning, such as establishing by reference to other data whether the presence of water is the

only condition to make the soil productive, whether water always transforms the desert way of life, or whether what happens to lettuce when transportation is not available (it spoils and is unmarketable) also happens to other products (such as oil). Or, in cases where it is possible to check against the real thing, a student will be able to verify predictions against facts.

CHART 11

Applying Generalizations

Teacher	*Student*	*Teacher follow through*
Suppose that . . . (a particular event occurred given certain conditions), what would happen?	Makes inferences.	Encourages additional inference. Selects inference(s) to develop.
What makes you think that would happen?	States explanation, identifies relationships.	Accepts explanation and seeks clarification if necessary.
What would be needed for that to happen?	Identifies facts necessary to a particular inference.	Decides whether these facts are sufficient and could be assumed to be present in the given situation.
Can someone give a different idea about what would happen?	States new inferences that differ in some respects from preceding ones.	Encourages alternative inferences, requests explanations and necessary conditions. Seeks clarification where necessary.
If, as one of you predicted, such-and-such happened, what do you think would happen after that?	Makes inferences related to the given inference.	Encourages additional inferences and selects those to pursue further.

This pattern of inviting inferences, requiring explanations, identifying necessary conditions, and encouraging divergent views is continued until the teacher decides to terminate the activity.

In order to make reasonable predictions, one must first analyze the problem to retrieve relevant facts and principles and apply them to this prediction. Students may know the generalizations but be unable to apply them because they cannot see their relationship to the problem, or they may fail because they just do not have any valid generalizations. They may even attempt to apply generalizations which are perfectly valid and tenable for a particular set of circumstances but which are irrelevant to the particular problem. In some cases, therefore, it is useful to ask for a repetition or a rereading of the generalizations that were developed from previous learning activities and *then* to ask the "What would happen if . . . " question. It is also usually necessary to bring students back to the job in hand by repeating the question.

To explain or to support a prediction, it is necessary to establish causal lines leading from one event to the other. For the third step, the student must use logical reasoning in order to determine how universal the prediction is, whether it applies to all cases, and what the sufficient causes for the occurrence of the prediction are.

This process of hypothesizing and predicting consequences via the application of known facts and generalizations invites a greater degree of divergent thinking than do either of the previously described strategies. This strategy therefore offers greater opportunities for creative use of knowledge. There is the possibility of thinking up a variety of lines of prediction. Unless the teacher is aware of the multiple possibilities in this situation, it is easy for him to limit the discussion to the most obvious possibilities by failing to encourage the out-of-the-way predictions. This could suppress incipient creative ideas.

The danger of blocking out creative possibilities often arises when the line taken by students directs the discussion into areas of content unfamiliar to the teacher. On the other hand, it is also easy to encourage fanciful speculation that is not supported by the facts or logic of the case. Such speculation can be carried to the point of wildly divergent possibilities which are completely unconstrained by facts and realities or, in other words, amount to imaginative storytelling. It is therefore equally important for teachers to see to it that the students are challenged to produce factual and logical support and that they begin to discriminate between tenable and untenable hypotheses and predictions.

Two important characteristics of this strategy need to be noted at this point. One is that the total product represents group thinking. Some students, especially the highly verbal ones, often make leaps in their predictions for which they cannot supply the connecting causal links. The predictions of the less verbal students tend to be on the more immediate

and concrete level. In fact, they often fill in the concrete links for the more verbal students. The characteristics which produce abstractness and concrete-mindedness therefore complement each other. In this way the heterogeneity of ability in a class becomes complementary and can be used advantageously. Heterogeneity of ability makes it possible for a group to produce a more complete and varied set of predictions and support than could be generated by any one individual no matter how brilliant. Teachers should therefore attempt to make use of this group quality in their classes.

MINOR STRATEGIES

That the basic sequences of the above major strategies should be adhered to no matter what the age or other circumstances of a class or group is well supported in the research of the Taba Curriculum Development Project.[4] Unless the basic form of such sequences is maintained there is little chance that what is done in social studies will improve the thinking skills given prominence in this curriculum. But there will be questions other than the ones included in the sequences described that teachers will need to ask depending on how the students respond to the basic ones. Some of these additional questions may be taken from four less elaborate strategies which are the outcome of studies (see McNaughton *et al.*, 1967) conducted by the evaluation team of the Taba project at San Francisco State College. They are of a kind a teacher may include in her responses to the answers students are giving to the questions forming part of one of the major strategies.

The data which led to the development of these strategies came from a detailed analysis of coded tapescripts of a number of class discussions related to the application of generalizations strategy.[5] However, there is reason to believe from observation of other aspects of the curriculum that these minor strategies could have a wider use in the curriculum. But, since the hard data apply only to this one major (generalizations) strategy, what follows must be related to that area alone and could therefore be regarded as an extension of the application of this generalizations strategy.

Whenever these minor strategies were used, students moved to a higher level of thinking than they had been operating on up to that point. See Chart 12 for examples of these four minor strategies. Their main characteristics are described below.

---

[4] See Hilda Taba, Director, *Teaching Strategies and Cognitive Functioning in Elementary School Children*, Washington, D.C., U.S. Office of Education, Cooperative Research Project No. 2404, February 1966, pp. 155–219.

[5] *Ibid.*

CHART 12

Examples of Minor Strategies

Repeating Responses, Grade 4

Thomas: If they brought water into the desert, they'd probably make it into a crop land just like the valley.

Teacher: All right—all these people are here. We said that many people were coming. What problems might they have? Can you think of something that might happen? Donna?

Donna: It would get crowded. If everyone came in one bunch, it would get crowded.

Teacher: It would get crowded—is there anything that would happen because of this? Martha?

Martha: Well, if they lived in the valley in that climate, in the nights they might freeze—they might die because the climate is so different.

Teacher: All right, it is a different climate. Now can you think of any problem that would be presented with all the people coming to this area? Louann?

Louann: Well, it would be so crowded the new people would crowd out the old ones.

Rephrasing Responses, Grade 5

Steve: Well, they are sure to have industry in this town.

Teacher: Industry, good. All right, Erin?

Erin: If they did have a town, they'd need law.

Teacher: All right, why would they need a law in this town?

Erin: With all this gold, they might fight over it, and they would need a law for that. I mean you have to have law to protect people from others wanting what they don't have.

Explanations of Predictions, Grade 4

Steve: Well, if they brought water in, then the desert could be made into farm land.

Teacher: Now, why would it be important to have farm land?

John: Well, if people came down to the desert, and there was no farming, they wouldn't be able to survive very well.

Teacher: Why not?

John: Because you need to have growing things to live on as well as things to sell.

Explanations of High-Level Responses, Grade 6

Robert: Well, their money—like Brazil—their money would be worth less. Like if you took a dollar there, it would be worth more than here.

Teacher: This is one idea you haven't mentioned yet, and it's a kind of interesting one. Can you tell the class why you think the money would be worth less?

Robert: Well, they wouldn't have any more exports, and if the things would go down, the prices on things would have to—and then when they work people earn less money.

---

1. Repeating Responses

If, after a student has made a prediction in response to the question, "What will happen if. . . ?" in an application of the generalizations strategy, and the teacher repeats the prediction and asks either for more information about the particular prediction (e.g., "What problems might they have about this?") or for more predictions (e.g., "Is there something else that would have to be done?"), the new prediction can be repeated and either a restatement of the prediction or further information asked for. It is highly likely in these circumstances that the response will be of a high level. In this particular context, high-level responses are:

a) *Inferential explanations.* (The colonists had more security because they were more in bunches than the pioneers.) Or,
b) *A generalization upon a generalization.* (The witch doctors are trying to do with wands and cracked eggs what our medical doctors do with words and needles. Or,
c) *A logical relationship among inferences.* (If you can't educate enough people to teach, then you don't have enough teachers.)

2. Rephrasing Responses

In this case when a student has made a prediction, the teacher slightly rephrases it without altering the essential meaning of the original statement, and then asks for further information on the prediction, for more predictions, or for an explanation of the prediction (e.g., "Why would this be important if it happened?"). A high level response of the order described above usually results. (See Chart 12 for example.)

3. Asking for Explanations of Predictions

After a student's prediction a teacher requests an explanation (e.g., "Why do you suppose they'd do that?") and, if necessary, repeats the request for a further explanation but in a slightly different form (e.g., "Why do you suppose people behave that way?"). Here, too, a high-level response will usually result. (See Chart 12, for example.)

4. Asking for Explanations of High-Level Responses

In this case a student may respond to the stimulus, "What will happen if. . . ?" with a plausible high-level response for which there has been little or no buildup. If the request for an explanation is followed by relevant factual support, then the validity of the initial response is confirmed. (See Chart 12, for example.)

It might be said of these minor strategies that they are unnecessarily elaborate and complex ways of saying that high-level thinking comes from asking good questions. But these strategies amount to something more than good questions, for, in the first place, they have no value without a teacher's sensitivity for the sequence that is most productive for a particular situation. This in turn depends upon recognition of the function of a strategy for a particular child. For example, in the data from which these minor strategies emerged, it appeared that repetition of a child's statement or of a series of statements from one or more children provided the children with an opportunity to see a possible relationship among a series of statements which up to that point had been merely juxtaposed rather than related. After these had been presented to the class, a request for a restatement or for further information provided in most cases the necessary stimulus for an inclusive generalization. At other times, repetition of the why, or tell-me-more-about, kind of question seemed enough to tip the balance toward higher levels of generalizations.

It was noted in this study that some teachers achieved high-level responses without the aid of one of the above strategies. This is likely to

be the case with teachers whose success in achieving the goals of social studies stems from an idiosyncratic style which is largely nontransferable. However, many teachers will find, as did the majority of those in the survey reported here, that sensitive use of these strategies will produce desired results.

It is also true that there are many other strategies like those described in this section that are yet to be discovered. These await discovery by researchers who have the time and the incentive to analyze what good teachers do and to derive from their analyses those strategies that can be equally well used by other teachers.

PROCEDURES

The procedures described here are not the only ones which are used in the Taba curriculum. However, the ones that have been selected are those that differ in many important respects from similarly labeled procedures prescribed by other curricula. Like the teaching strategies described in the foregoing section, they are based on research and have value because of the key role they can play in the achievement of the objectives of this curriculum. Unlike strategies, they may be modified quite drastically and in a variety of ways to suit particular groups and circumstances. It should be noted at this point that an important omission from the procedures described in this section is the set of procedures associated with questioning. A separate chapter has been set aside to deal with these.

Translating Content into Learnable Tasks

This procedure includes the selection of content, the organization of content, planning sequences of learning activities, and adapting the sequences of learning activities to class needs.

The principal source of content for this curriculum is the various social science disciplines and history. Procedures for translating material from the disciplines into learnable tasks are incorporated in the curriculum guides. Some of this material is translated into concepts to be developed spirally. Some is translated into main ideas which represent explanations of what it is about the concepts that will be dealt with and around which units will be organized; and some is translated into samples of specific instances, or content, to support the development of the main ideas. All of these steps represent efforts to convert content into learnable sequences.

Main ideas, it must be remembered, provide one of the bases for organizing content in this curriculum. Each main idea is more or less

complete in itself, but at the same time each main idea furnishes background for the next. Any procedural alterations should therefore keep this fact in mind.

While the main ideas serve as the centers for organization in the units, several different patterns of organization are used. In the sixth grade, for example, more than one organizational pattern is used. In the first unit, three civilizations are studied by means of comparing and contrasting dimensions of life within each civilization, such as comparing the social organizations and types of technology in each. The units that follow are organized around a topical development of certain problems. As an example, the problems of economic development are studied through samplings of countries which illustrate contrasting patterns (see Chapter 3).

Various patterns of organization for the units of study provide for a reduction of coverage of information without sacrificing the central purpose of an organized study of the main ideas. Major sequences of learning activities and of questions within the sequences have been carefully selected to implement the objectives. Again, any procedural deviation should be made in such a way that it will not detract from this goal.

Having said this, one must make clear that while the teaching units provide detailed teaching procedures, an individual teacher need not be completely bound to the curriculum guide. Certain aspects of the curriculum should be altered if they are not suited to a particular group of children. For example, if the coverage is found to be too extensive for a particular group, the teacher should omit certain contributing ideas and materials which develop them, provided that the contributing ideas are not absolutely necessary for the development of the main idea. In another class, a particular detail, say, the question suggested for the opener, may be inappropriate. In such a case, the teacher should provide an alternative. However, when changes are made, the teacher should observe the *same* criteria which governed the selection of a particular item in the first place. For example, the alternative opener should serve the same functions as did the suggested opener. The same is true for the study questions which represent the dimensions of the topic to be studied, for whatever material is gathered in response to these questions must be suitable for the development of the main idea and for the further development of thinking skills and attitudes.

The guides include some study questions which, along with materials suggested for their development, could be omitted or modified with a particular class. A rapidly moving class may be able to study a question in depth or to pursue a sophisticated aspect of a question (such as a study within a unit on Latin America of the anthropological theories concerning

the Indians' migration to the American continent). In general, any alterations of the procedures recommended in the curriculum are made either to permit depth studies for able groups or to reduce coverage when slower pacing is desirable. Thus, there should be no need to change the nature of the content and certainly not the main ideas which remain appropriate for all levels and kinds of classes and which fits into a total scheme that has a philosophical rationale to it.

Comparing and Contrasting

Comparing and contrasting are effective teaching procedures for use after a study which focuses upon similar aspects of unrelated content (content sampling). The same questions can be asked about several selected samples. This approach has been found to be one of the more effective ways of sharpening general insights and of developing abstract concepts with which to explain similar phenomena not studied directly.

The Curriculum Guides provide many occasions for such comparisons. In the third-grade curriculum communities around the world are compared with our own. Fifth-grade students are asked to compare the people who make up America, their problems, and backgrounds. In the sixth grade, comparisons are made of major areas of societal activities, such as education, trade, and technology, in a selected sample of Latin American states.

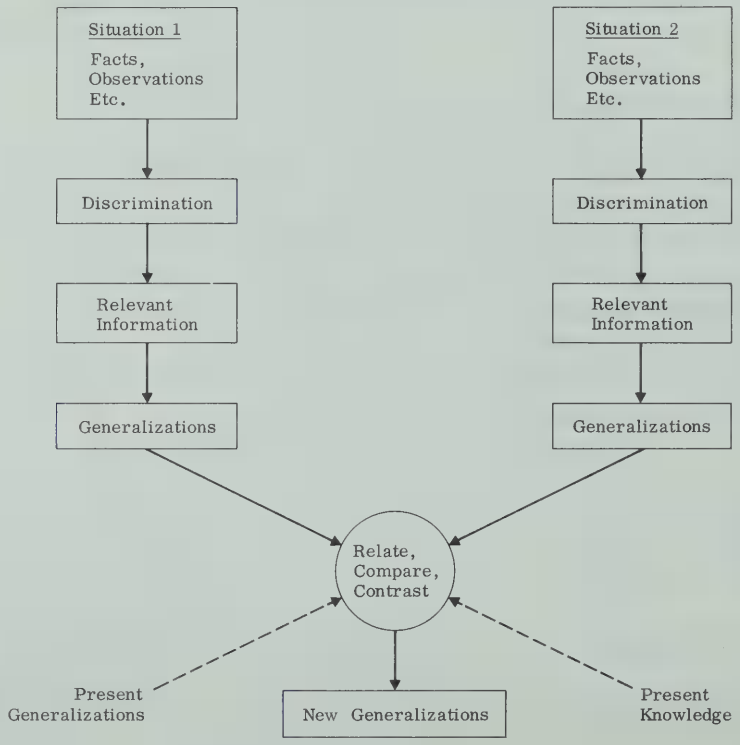
A procedure which makes these comparisons more useful than they otherwise might be is illustrated in Figure 9. Situation 1 could represent one country (for example, Argentina), and Situation 2 could represent another (for example, Brazil). A similar chart could be made of any aspect treated, such as education in Brazil, Argentina, and Mexico.

The procedure for effective comparing and contrasting requires that each situation be studied by the scheme indicated in the chart. The first step is the securing of specific information and making necessary discriminations for analysis of the facts. The second step is bringing other relevant information to bear on these facts, and the final step is making possible generalizations.

It is not usually fruitful to make comparisons until the more generalized ideas on each content sampling are available. For example, instead of comparing point by point the number of schools in Brazil and Argentina, it is more useful to compare the generalizations about the level of education in each, and then, if necessary, support the generalization by checking the figures about the number of schools.

FIGURE 9

Procedure for Developing Generalizations by Means of Comparisons



As can be seen, there could be similar treatments of each aspect of life in each country studied, such as patterns of trade and of government. In other words, the scheme illustrated in Figure 9 could be applied, in turn, to each dimension and, then, to the overall situation.

Use of cultures as one set of categories (down the side) and topics studied about them as another (along the top) permits organization of information on a retrieval chart in a matrix form in such a way as to provide a conceptual framework to facilitate any number of subsequent comparisons, that is, by

cultures ("What kinds of differences are there among educational patterns in these cultures?") or by topics ("How does the occupational diversity compare with their educational development?") (See Chart 13.)

The teaching procedure of comparing and contrasting is designed to:

1. Break complex assignments into smaller tasks upon which the pupils can clearly focus one at a time.
2. Help students organize their information so that tasks can be handled efficiently as well as effectively, in terms of the ultimate goals.
3. Arrange tasks in an incremental sequence so that each previous task lays the ground-work for a subsequent task.
4. Make sure that points are sufficiently generalized before comparing and contrasting. Otherwise comparing is likely to be frustrating as well as unproductive.

Since one of the objectives of the Taba curriculum is to develop an increasingly more profound understanding of the causes of human behavior, an important use of comparing and contrasting will be on those occasions when students are called on to relate what they have been studying to human beings in general (that is, in terms of their experience) as well as to themselves. Even though many students, because of their immaturity or lack of experience with this kind of question, may not at first be able to stretch their minds to the extent of relating a set of conclusions about the particular groups they have been studying to human behavior in general, they should be asked to do so as often as possible. Appropriate questions will be along the following lines: "As you think about the people we've been studying and about others you know of, what can you say about people in general?" And then: "When you compare their way of living with yours, what can you say about the way you do things?"

It is clear from the work of Piaget that inferences of this kind will be difficult for students to make and that they will be particularly difficult for younger, and for less experienced students. This knowledge should never be used as an excuse for not stretching their minds to this extent. Instead it should be used as both a challenge and a caution to devise ways in which students might get closer to the objective involved. There also seems to be merit, from a philosophical standpoint, in having students know that they are expected to think deeply about what they do in social studies and that the material they are studying is concerned with their own lives even though the connections are not always as clear on some occasions as they are on others.

CHART 13

Name	*Country Land and Climate*	*Farming*	*Tools Labor*	*Occupations*	*Religion*	*Family Structure*
AZTEC (Spoke Nahuatl)	Mexico Highlands Tropical	Planted Weeded Fallowed No irrigation Fertilized Made floating island	Digging stick Human	Farmer-warriors Government officers Merchant-trader-spies Priests Craftsmen: Pottery makers Weavers Stone carvers Silversmiths Artists	Many gods Belief in life after death Sacrifice to gods	More than one wife Father head Strict life for children Learned from parents Separate school for boys and girls
SPANISH (Spoke Spanish)	Spain Mostly mountainous Too cold or too dry, with much of the land poor for farming Coast has subtropic climate	Planted Weeded Harvested Fallowed Irrigated Fertilized	Carts Animals Plow Threshing board Metal tools	Crown control business Land owners (nobles, clergy, government officials) Middle class: Lawyers Merchants Well-to-do artisans Farmers Miners Textile makers Masses: poor, gradually freed from serfdom	Catholic Belief in one god	One wife Father head Women carefully guarded Desire for many children Baptism and godparents important Upper class women did not do any manual labor; servants did work
YORUBAS (Spoke Yoruba)	West Africa (Nigeria) Forest and savannas Tropical	Planted Weeded Harvested Fallowed	Short-handled hoe Axe and other metal tools Human	Farmers who were also skilled traders and craftsmen Pottery makers (women) Weavers (men and women) Cloth dyers Silversmiths Blacksmiths Wood carvers Medicine makers Drummers	Many gods (over 400) Ancestor worship Belief in life after death Built shrines for gods; carved wooden figures of gods	More than one wife Oldest male head Many families lived in one compound Learned from parents Had age-group organizations

CHART 13—*continued*

Name	*Government*	*Education*	*Inventions and developments*	*Laws*
AZTEC (Spoke Nahuatl)	Ruler Council Elected tribal leaders	Girls, boys separated at school at 12 Boys—common school and also school for nobles Family members taught informally	Beginnings of an alphabet Aqueducts Stone carvings Pyramids Elementary arch (no key stones) Simple names	Specific rules for operating in the market; on how to behave in battle, etc. Laws on land ownership prohibited individuals from selling the land they farmed
SPANISH (Spoke Spanish)	King or Queen Governor Municipal councils of towns Clergy	Universities admitted men and women; rich and poor Isabella initiated general compulsory education but it was not effectively enforced	Inquisition began 1478; religious intolerance Major product was wool Printing press used 1471 Trade scorned; conducted by Jews, soldiering esteemed, strong armies Had guns Navy ruled oceans	Charters of liberty (for towns) established during war with Moors Rules of common law; freedom of speech and assembly Laws established by Cortes or Crown Laws defined rights and authorities of officials and common men
YORUBAS (Spoke Yoruba)	King Council (1st noble) Military chiefs (2nd noble) District and provincial kings Town mayor Town council Quarter chiefs Compound heads	No written alphabet; court historians were taught orally to memorize history and traditions Tribal leaders, family members, storytellers all taught informally	Used shells as money Used barter in large transactions Iron tools and weapons Grew cotton and wove cloth Pottery, wood, and leather art Mud houses; thatched roofs Terracotta and brass art work	An unwritten constitution, maintained orally, defined authority of king and other officials Laws, crimes, and punishments, property rights, inheritance, etc. Authorities at each level of government had power to enact and repeal laws Disputes and violations handled by specified officials Laws prohibited men from selling the land they farmed

Out of the above discussion comes a fifth element in the teaching procedure of comparing and contrasting, namely:

5. As often as possible, have students relate conclusions about a particular group or a number of groups to others they know about (especially themselves). In this way, they can be encouraged toward a deeper understanding of human behavior, which, from our standpoint, is basically what social studies is all about.

Discussion Procedures

Class discussion, a valuable teaching tool in any subject field, is essential to the successful use of this social curriculum. Discussion is used extensively to develop cognitive skills, attitudes, feelings, and sensitivities, and to get the greatest possible benefit from the content samples, particularly when the method used is comparing and contrasting.

Conducting a class discussion demands on-the-spot decisions, diagnosis, and formulation of questions while maintaining control of the class. Many teachers are reluctant to involve the class in discussion because of previous unsuccessful experiences. However, teachers who have mastered the use of discussion as a teaching tool testify, first, that it is well worth doing; second that there is no such thing as a perfect discussion—hindsight will always tell the teacher he could have done something better; and third, that the only way to learn discussion strategies is to try them. Teachers, as well as students, learn by doing and by the discovery process.

The teacher's attitude sets the classroom climate and is perhaps *the* most important factor in any discussion. If the atmosphere is one of rigid control, the teacher will get a "recitation" rather than a free flow of discussion. If the climate is too permissive or, in other words, if the teacher abandons the discussion to the students, in all probability the flow of ideas will be limited and chaotic; the more verbal students will monopolize the discussion, and the more aggressive children may stifle others by disparaging their offerings. In general, the classroom should be a comfortable place in which to talk. The teacher should help children to become increasingly aware of the offerings of others and to build upon these offerings. They should also be aware that their classroom is one in which they are able to comment on and discuss freely topics that are important to them.

The effectiveness of discussion as a teaching procedure has been verified by the project through analysis of taped discussions which were spaced throughout a year in a number of classrooms. As an instance of

both success and growth in one second grade, for example, the first tape taken contained no references by children to what anyone else had said, while the last tape contained nineteen such references.

The use of tape recorders is recommended to teachers not only because tapes of discussions are valuable diagnostic tools but also because recorded class discussions can then be analyzed at a later date by the teacher and/or the class.

Discussion procedures involve three general *types of discussions*, each of which requires a different procedure and a different degree of control by the teacher; the degree of control, in turn, depends on the purpose or the task. But whatever the task or purpose, in all discussions the teacher must constantly and simultaneously evaluate two aspects of the responses: first, the relevance of what is said to the content focus; and, second, the level of the thought processes, attitudes, or skills which the students bring to bear on the content. The purpose of the discussion determines the degree to which either or both need to be channeled by teacher direction.

a) *Free discussions* require little direction except for the initial focusing. Children's responses are accepted as they are offered, except for occasional clarification. Free discussions are used for opening up new topics. They may simply involve a listing of problems, ideas, or remembered content, and reacting to a situation which has to do with feelings. For example, feeling reactions to a situation may be sought after the reading of a story or after the description of an incident on the playground or in the classroom. Since feelings differ, no particular feeling is more right than another. The teacher must allow personal spontaneity and must refrain from evaluating responses.

b) *Semicontrolled discussions* are used for the exchange of ideas after a period of intake of information. The students may have read, visited, or explored something. Now the teacher wants them to integrate the information which they have acquired. When committees report after independent study, exchange of information is again the purpose. At several points in such a discussion the teacher may need to remind students of the purpose of the discussion or of the similarities and differences among the variety of viewpoints expressed. Since the information presented is to be used later for comparing and contrasting, it is useful to chart discussion at this point. In the lower grades, the teacher may need to make the chart and to supply much of the basic information as well. In the upper grades, the children may fill in their own copies of the chart for later reference. However, the teacher may need to summarize information on the chalkboard to be sure everyone has the main points for later use.

c) *Controlled discussions* are those in which the cognitive processes are directed by a carefully planned sequence of questions. The purpose for controlled discussion is to establish a particular sequence of steps in processing data or in developing ideas. In this case, students must supply data as well as process them. Such discussions are usually associated with the teaching strategies discussed earlier in this chapter and are more appropriately classified as strategies than procedures.

Controlled discussions help students:

1. to systematically develop cognitive skills (go beyond the known facts to make an inference by arriving at a generalization or by applying a generalization to make a prediction).
2. to solve problems or to make decisions (to decide on a course of action or to establish norms or rules).

d) *Role in discussions.* In any discussion specific roles must be assumed by each of the participants, i.e., as providers of information, summarizers, correcters. Initially the teacher may need to assume all of the roles, but after having gained experience in the various types of discussions, the pupils should eventually assume some of the roles.

The objective of the discussion process is to encourage the pupil to become increasingly more autonomous in processing information, or less dependent on the teacher for support and for direction. Such a shift is accomplished gradually. If the teacher abdicates her role too soon, the pupils may not learn the kinds of roles which are necessary to maintain a productive discussion. However, as students become increasingly aware of the dynamics of the discussion, they can also assume the appropriate roles in developing a productive discussion. This awareness can be developed on any grade level. If the teacher acts as the ultimate authority in all discussions, such awareness will never be developed.

A curriculum which stresses active learning, especially of cognitive skills, relies heavily on questions and question sequences. If the development of autonomy in thinking is an important objective in a curriculum, questions or the "seeking" functions of teaching are vastly more important than the "giving" functions. The topic of questions and questioning is clearly of sufficient importance to warrant extended treatment in a separate chapter (see Chapter 6).

Formulating Hypotheses

This procedure assumes considerable importance in the Taba curriculum because of the emphasis given in it to students' thinking about and through

problems and situations associated with interactions among humans. The use of the term in this curriculum is confined to a statement in the form of a piece of speculation or a prediction based on relatively little data, applying to relatively specific instances, and, where possible, validated to some degree at a later time.

In curricula in which teachers are in one way or another providing children with answers to a high proportion of the problems they pose, there will be little place for hypothesizing or whatever hypothesizing will take place will be in the nature of a game in which students try to guess the answer that the teacher has in mind. The certainty that a teacher will ultimately give away the answer inevitably lowers the level of thinking involved to that of a guessing game.

In the Taba curriculum in which inquiry processes are given a high priority and in which the answers sought are those that the students have worked toward as a result of their own thinking about data, hypothesizing is a part of a thought-provoking process. For, in the first place, a variety of answers will be possible, with each of them necessarily couched in tentative terms. Each will be an approximation to the truth which cannot be known by the teacher or anyone else. The role of hypotheses in this setting is one of providing an initial focus for thought processes and so to narrow down the range of concerns as to increase the likelihood of successfully coping with the problem being considered. A student's thinking is likely to be unproductive if the problem is conceived too broadly or if an attempt is made to analyze too many facts in too many ways at the same time.

Given the setting of the kind of hypothesis used in this curriculum and encouragement to respond freely, creative thinking becomes possible. Given also the task of checking their creative speculations against a selection of reality, students are able to rate the suitability of the preliminary thinking represented in the hypothesis and to consider any discrepancies that appear. The checking procedure may be in the form of a logical analysis (e.g., "We now know that many of the things they like and dislike are different from our likes and dislikes, so it is probable that they won't act this way after all"). Or else it may be possible to check hypotheses against the results of later investigation. In these circumstances, it is the consideration of reasons for differences that can deepen insights into human behavior.

Hypotheses are often called for at the beginning of a unit. In the sixth grade, for example, students are asked to hypothesize about where the people who reached the lands now known as the Americas had come from. Shortly afterward they match their speculations against theory and evidence from experts.

At other times students are asked to hypothesize about the feelings of others. Their responses are encouraged to such a degree that no attempt is made to correct anything that is fanciful or faulty as it is given, but once additional information has been gathered, hypotheses are checked. In Grade 1, for example, the students are told a part of a story called *A New Friend* and are then asked to discuss what might happen or to role-play how they think the story will end. After the reading is completed, they are asked "How was the ending in the story like or different from the way we thought it would be?" and then "Why do you think some of it was different?"

A second use of hypotheses is as a part of the strategy for applying generalizations. This has already been described and will therefore not be discussed here.

Much of what has been said about this procedure is very similar to what Bruner (1961) discusses under the heading of Intuition. The principal difference lies in the fact that the philosophical bases for the hypothesizing procedure in this curriculum are also common to most of the other procedures and strategies. Hypothesizing therefore is one element of a total scheme directed toward the achievement of social studies objectives.

SUMMARY

The distinction made in this chapter between strategies and procedures is one based on the amount of variation that is possible in the order of the steps involved if objectives are to be achieved. Research undertaken by members of the Taba Curriculum Development Project and by others indicates that stability in the order of steps within teaching strategies is more important than stability in teaching procedures. If the sequence of steps suggested in these strategies is not followed there may be only limited improvement in thinking skills. This is not to suggest that there will not be other strategies which will produce similar or better results but that teachers who follow the steps outlined in this chapter will be more likely than not to improve students' thinking skills. Procedures, on the other hand, are described in more general terms and are therefore more amenable to individual interpretation. The key to their successful implementation is a firm grasp of the principles on which they are based.

The list of strategies and procedures discussed in this chapter is by no means complete but it does represent the majority of those which have been successfully developed by Hilda Taba and her staff.

REFERENCES

Bruner, J., J. J. Goodnow, and G. A. Austin, *A Study of Thinking*, Science Editions, Inc. New York, 1965.

Bruner, J., *The Process of Education*, Harvard University Press, Cambridge, 1961.

Gagné, R. M., *The Conditions of Learning*, Holt, Rinehart & Winston, Inc., New York, 1965.

McNaughton, A. H., N. E. Wallen, Shukieho, Crawford, W. R., "The Use of Teaching Modules to Study High Level Thinking in the Social Studies," *The Journal of Teacher Education*, 18 : 4, Winter 1967, pp. 495–502.

Piaget, J., *The Psychology of Intelligence*, Harcourt, Brace, New York, 1950.

Piaget, J., in Ripple, Rand Rockcastle, V. H. (eds.) *Piaget Rediscovered*, School of Education, Cornell University, 1964.

Sigel, I., *A Teaching Strategy Derived from Some Piagetian Concepts*, Publication No. 113, Social Science Education Consortium, Boulder, Colorado (University of Colorado) 1966.

Smedslund, J., "The Acquisition of Conservation of Substance and Weight in Children" in *Readings in the Psychology of Cognition* by R. C. Anderson and D. P. Dusubel (eds.), Holt, Rinehart & Winston, New York, 1965.

Vygotsky, L. S., *Thought and Language*, Wiley, New York, 1962.

Chapter 6 THE KEY ROLE OF QUESTIONING

Two of the major objectives of the Taba Social Studies Curriculum are to develop students' *thinking skills* and then to develop *autonomous thinking* in students. Asking good questions is one of the most effective tools a teacher has to help him work toward these objectives. Since the inferring and generalizing task is the most frequently used classroom procedure or teaching strategy, it will be used here to illustrate some of the most important points about asking good questions.

THE ROLE OF THE QUESTIONER

Inferring and generalizing, like the other cognitive tasks, require that in classroom discussion both teacher and students assume a variety of roles, one of the most important being the role of questioner. Initially, the teacher assumes this role, but one of any teacher's goals should be for the students ultimately to assume part of it. It is hoped that eventually they will question other students, the teacher, their textbooks, and themselves on their own. Students' readiness to assume the role of the questioner does not depend on grade level alone, but on the kind of past experience they have had in discussion and on their awareness of discussion techniques. As students begin to assume the role of questioner the teacher should encourage them to do so.

What can the teacher do to help students become skillful questioners? Techniques such as pausing may encourage students to respond to or support another's point of view without having a question directed to them.

Questions, such as "Am I to assume that what Bill has said is clear to everyone?" and "Are there questions that have been raised in your minds?", suggest to the students that they are to be actively and thoughtfully involved in the responses of others. There is, of course, always the danger that students may become dependent questioners. That is, they may ask questions that request others to do their thinking for them. For example, the question "Why would some of the Indian tribes fight with Cortes against the Aztecs?" might indicate the student-questioner is not using the information he has on the relation of the Aztec to other tribes to make reasonable inferences of his own. The student-questioner should be encouraged to ask questions that (1) secure for him the data he needs and/or (2) elicit inferences from others that he intends to compare with his own. However, insight into the kind of questions that are most productive does not develop after a few lessons on questioning techniques—the role will remain basically the teacher's over the initial period of training.

THE OPENING QUESTION

The focusing or opening question in the inferring and generalizing task should have two characteristics. On the one hand, it should be an open question; on the other hand, it should set the focus for the discussion. A question such as, "What will we talk about today, students?" is too open, while a question such as, "what was the carpenter using to pound nails into boards?" has too narrow a focus for an initial question "What did you notice about the new home we saw being built yesterday?" meets the criterion of a balance between openness and focus.

An open question allows many students to enter the discussion at the least demanding cognitive level. Some who may drop out later, at the point at which inferences and generalizations are sought, can generally enter at the fact level. A closed question such as, "When did Columbus sail?" permits only one child to respond. If the first student knows the answer that's the end of it. The teacher must then ask a second question to elicit another fact. A series of closed questions inevitably develops a teacher-student, teacher-student sequence. It also prevents the child who has a particular piece of information to offer from entering the discussion if the teacher does not ask "the right question."

Any discussion in which a focus is not established at the outset is likely to become unproductive. A teacher whose opening question lacks focus may himself be unsure of the focus or the purpose of the discussion and his students will suffer accordingly. He must always be conscious of the

discussion purpose; if it is to have the class interpret data and make generalizations, then the discussion must be kept moving in that direction. Thus, brainstorming, which can be a very useful discussion technique, is quite out of place in the inferring and generalizing task.

Once the focus has been set, the discussion can still become sidetracked in a number of ways. In order to maintain the focus, then, the teacher may need to restate the focusing question more than once. However, it should be pointed out that when a teacher is trying to keep students on the track, he is attempting to control the *process*, not the *content*, of the discussion. Furthermore, a teacher should not decide *what* students are going to say, but rather at what point he will try to encourage them to perform a specific task, for example, compare and contrast different pieces of data. He also has to decide at what point to ask questions in order to get the students to make broad generalizations, that is, again lift the discussion to a higher level. Here too, he must be thinking of the process part rather than the content part of the discussion.

An opening question must do more than invite wide participation and set the focus. It must be worded so as to elicit the kind of data that are needed for the task at hand which may be to build on events in a film in order to arrive at generalizations about the nature and some possible causes of human behavior. Since the teacher's purpose is to help students later compare events, he must be sure in the first step of the discussion to elicit contrasting data so that they will have something to compare. If he asks an opening question such as "What did you see in the film?," the students may give responses unrelated to his discussion purpose, but if he asks, "What *happened* in the film?." they are more likely to give responses about the events in it. The word "happen" is important when the overall discussion purpose is to build on *events* in a film or story. Thus, the wording of the opening question should be related not only to the immediate purpose of enumerating data but also the overall purpose of the discussion.
Teachers of young children are sometimes faced with the students' compiling a bank of data that provides little range or contrast. This situation is often brought about by the teacher's giving an example as she questions the students. For example:

Teacher: When you have some money of your very own what do you buy? Some children might buy a puppy.

Child 1: I'd buy a kitten.

Child 2: I'd buy a bird. Etc.

Such a chain is not easily broken. One technique is to ask the students to group these items, such as, "What might we call all these things?" Then ask, "What can you think of that is different from the things we have grouped?" In the primary grades chains often develop when the teacher has rewarded the first contributor with a smile or a word of approval. The adult-oriented young student is then apt to model his response after the one that brought the reward.

The class should stay at the enumerating or listing step long enough to generate a broad sampling of data. It is important that these details be listed on the chalkboard or on butcher paper so that the class can refer quickly to them as the discussion moves to higher levels. The energy of the students should be expended in generating ideas, not in memory work. This first step can usually be accomplished in a short period of time if students can obtain data from a common experience. When they begin to repeat themselves, or when they offer more than is needed, or when the slower students have had a chance to contribute, then the teacher should move to the next step.

In asking questions that elicit fact-level information or request inferences, it is easy to be misled into thinking that every question starting with "what" is a fact-level memory question and every question starting with "why" is an inference-level question. But if one asks, "What do you think might be the consequences of this?," the question is certainly not low-level, unless the consequences have been given to the class in their reading. Similarly, a "why" question can be very low-level, if the reason has been given as a fact in the text. Teachers need to examine what a question demands of students mentally in order to determine whether the question requires them to remember facts or to process information and make an inference.

LIFTING QUESTIONS

At the second step of the inferring and generalizing task, students look for relationships among data. If the discussion is initiated at this level, it is likely to become a dialogue between the teacher and the brightest student, unless of course everyone is thoroughly familiar with the situation being discussed. At this point, a teacher needs to word his questions in such a way that he encourages students to be tentative about knowledge and opinions. Questions such as "What *seems to be* reflected in this?" or "*What do you think* made these people do these things?" or "What *might be* the results of

this?" rather than "What made these people do these things?", tend to elicit more qualified statements from students. Open-minded adults who state their opinions with some degree of tentativeness tend to promote this desirable attitude in children.

Once the discussion has been lifted to a higher level, the teacher should try to extend it by encouraging other students to come in at the same level. Some students who cannot initiate lifts can often think of an example or a similar idea. Lifting and asking for consequences requires teachers at times to follow through in short sequences with particular students, either when correcting errors or when trying to encourage a student to follow through on possible consequences. A short sequence between teacher and students develops as the teacher says, "Well, tell me a little more," and then, "What might be the result of that?" and so on. Following through with one student is rather difficult for many teachers to do because they are so committed to giving everybody a turn. But since students do not necessarily think "in turns", it seems reasonable for a teacher to stay with a student long enough to provide an opportunity for him to develop his idea—at the same time keeping an eye on what is happening to the rest of the class. How long to stay with a student is a decision the teacher has to make on his feet. Short sequences with one student usually go quite rapidly. Cutting off a student immediately after he has responded with the nucleus of an idea is usually not a very good technique for obvious reasons. Furthermore, teachers have found that staying with one child for a short sequence does not lose the rest of the class and it sometimes helps students to move to a higher level of thinking. The important reason for staying with a student, however, is to foster the development of ideas, not simply to produce a greater volume of words.

Another very important aspect of discussions is pacing. After a question has been asked, how long is a teacher willing to wait for a comment or response? Five seconds seems like a fairly long time. But students need time to think. And good pacing also can give the teacher time to think about how to handle the remainder of the sequence. Rapid-fire discussions are seldom throughtful discussions. Careful pacing also provides time for students to gather data, to consider the ideas of others and possibly to change their own minds. An example of a student changing her mind occurred in a fourth grade when the students were predicting what might happen if oil were discovered in an isolated area. Anna made a prediction based on her knowledge of what had happened in the California Gold rush. After a considerable period had passed she said, "I want to disagree with David, and Jerry and myself. Finding oil isn't like finding gold. You don't go out with

a tin cup and dip it up." She went on to point out the differences: how it took a lot of money, how a few men came in with a lot of modern equipment and sank a shaft, and so on. Change of thinking and willingness to reconsider one's contribution that has already been accepted are likely to occur only when students have had time to internalize what is being said and in a climate where change of viewpoint is considered a normal result of evaluation of one's ideas.

The remaining steps in the task of inferring and generalizing involve combining relationships and making broad but tentative generalizations. Students need practice in these skills since they are not an automatic by-product of maturation and experience (although these elements do play a large part in improving student's generalizing skills). Students can learn—and teachers can teach them—to make more thoughtful generalizations. When a teacher asks students to generalize, he is really asking them to put several relationships together and make a statement about them. He is asking them to think and speak in more abstract terms. This requires skills such as building on the ideas of others and therefore listening to and thinking about what they have to say, giving reasons for one's opinions, and limiting the statement to the data one possesses. If a teacher inducts his students into the process, he can help them learn these skills.

When students have had little or no experience in generalizing consciously, a teacher may have to reword his generalizing question several times. He may have to start by asking for a more limited generalization and then ask questions such as "Could you tell us more?" "What was generally true?" "Could you give me a statement that includes more of our data?" As the students gain experience in making generalizations, they should not only make better ones but also evaluate their own and those of their classmates.

A narrowly focused question such as "Now, can you give me a generalization about education in a particular country?" may produce few responses. Rather, teachers should seek generalizations from a body of data from which students can make statements in *several areas*. Some examples of good, broad generalizing questions are: "What can you say was generally true about what we have been talking about"? "What do you make of all that we have been saying here?" "What would you consider an important idea that you got from this?" Some students will think a specific item is important; if so, the teacher should accept it. Other students will move toward "big ideas." One way of getting students to move toward "big ideas" is by letting them in on the process. If a class feels a teacher is interfering by constantly asking "why," the teacher might help them identify

the levels of thinking that different types of questions require. Experience has shown that in these circumstances classes often become enthusiastic and more analytical about both teacher's and classmates' questions. One seventh-grade teacher took this idea even further: When his class was having a discussion or committee reports, he would have a team evaluate the process as well as the content. A team of three would sit aside and evaluate the kinds of questions the committees asked one another.

What does all of this mean for the teacher? The process of generalizing is related to the way in which adults must think about curriculum. In curriculum planning as well as in discussion planning, adults start at a high level—they think about the possible or probable results or conclusions and then they plan specific strategies for producing them. In teaching, however, the process is reversed. The main ideas of the Taba Curriculum are arrived at inductively—by students starting at the bottom with the specifics and building up from there. Curriculum planning begins with ideas and/or concepts which have to be analyzed in terms of how they are to be developed. How does one go about developing them? Teachers need to think about what they are after, where they are going, and how they are going to get there. Much of the way they get there has to do with questioning.

In the development of main ideas and concepts the direction of students' thinking is from the specific data to the idea, and eventually through contact with many applications of the idea to more abstract forms of it and ultimately to a generalized concept.

Let us look at two question sequences (one deductive and one inductive) planned by two teachers who wanted their classes to identify some of the characteristics of Cortes and to make general statements about them. One teacher approached the task by asking, "From all that you have read about Cortes, what kind of person do you think he was?" In other words, she asked the students to make inferences in the opening question. Her class identified several characteristics, and she followed up on certain ones by asking "What did he do that makes you think that he was tricky?" "Why do you think that he was courageous?" and so on.

This teacher was using a deductive questioning sequence, asking students to start by making trial inferences or conclusions and then to support them.

The second teacher's opening question was, "As you think of Cortes, what were some of the things he did?" She then made a list of a number of Cortes' acts. Next, she moved in and said, "Well, let's look at, for instance, his burning of ships. What kind of person do you think would do this?" And "Let's think of Cortes as he wept on 'The Sad Night.' What

kind of person do you think would do this?" She pursued a number of Cortes' actions and then asked, "Now, what kind of person would you say Cortes was?" One child might see him as a man of strong character; another might see him as a man of many different characteristics. The teacher who sought a conclusion in her opening question denied her class the opportunity to examine his actions before judging him. The second teacher planned to have her children see as many sides as they could. A teacher can facilitate this end by wording questions so that they do not give away the answers and by ensuring (through the intake he selects and the questions he asks) that the students have contrasting data. Whether he uses the inductive or the deductive process, a teacher should be aware of both and choose the process which best suits the nature of his class and the purpose of the particular discussion.

The teacher should also consider the nature of the class when planning the comprehensiveness of his questions. For example, suppose that two sixth-grade classes were studying their retrieval charts on the Yoruba, the Aztec, and the Spanish. A teacher of an average or above-average class might begin with the question, "What differences and/or likenesses do you notice?" His follow-up question might be, "Then how do you account for these differences and likenesses?" However, a teacher of a slower class might begin with, "What differences do you see?" After listing them he would ask, "How do you account for these differences?" He would then move to likenesses and follow the same procedure. Some classes become overwhelmed at a large mass of data on a chart, and find it difficult to identify both likenesses and differences at the same time.

Once students in both kinds of classes had looked at some of the likenesses and differences, the first teacher might move to a question such as, "Do there seem to be some kinds of things on the chart that explain each other?" However, the second teacher might make the question somewhat simpler by picking up one dimension, such as land use, and asking whether there was something else on the chart that seemed to be related to it, to go with it. Most students can find relationships and attain high levels of thinking, but some need to proceed at a slower pace and in smaller steps than others.

At times a discussion bogs down because the students need additional information, or because the volume of data with which they are dealing is greater than they can comprehend, or perhaps because the question being asked is vague. At such points the teacher should not hesitate to supply information or to present a model or a setting that reduces the situation being discussed to one which the students can handle. A model may also

be used to clarify a vague question. For example, a class was discussing the loss of a market in a one-crop economy and the students bogged down. So the teacher said, "Now just suppose that usually for a day's work I brought home $30 and one day I told my wife that from now on I could bring home only $15." This brought the problem to the level of the students who could think in tens much more easily than in millions. They could see what this was going to mean in terms of a particular family's livelihood and they were better able, then, to transfer that understanding to communities and nations.

Students often suggest a model or think they see a relationship between one set of circumstances and another. Remember that when students reach back in their minds for models they often make mistakes, in the form of an oversimplification or a tenuous connection. Experience and maturity should develop an alertness to the need to think about a number of the variables in any social situation. Thus, they should learn to inquire as to the extent to which the simple connections they make are proper ones. For example, a sixth-grade student looking at the class retrieval chart on Latin America said, "Argentina didn't have any wars." "What makes you think so?" the teacher asked. "Well, now when we studied Haiti," and he pointed to the data on the board, "we found that they don't have very good education in Haiti. And when I was studying that, I remember that we said that when they got their freedom, they were so impoverished paying for that war, they didn't have money for education." He took a deep breath "I notice that Argentina has good education, so they didn't have any wars." This student was trying to relate something he already knew to a new situation. His teacher said, "You know, that would be worth checking out. Let's find out about it. Do we know this for sure from what's up here?" No, they didn't have any data on whether or not Argentina had had any wars. "Well, this would be well worth checking." Notice in this sequence how small but important the teacher's role is. Taba found that an analysis of discussion in 24 fourth- fifth- and sixth-grade classrooms revealed that higher levels of thought were reached whenever the teacher injected new information or provided a model.[1]

Students can develop generalizations both inductively and deductively. The purpose of the inferring and generalizing task is not to teach a particular generalization but to develop skill in generalizing, to teach a *process by which students can become* more effective thinkers. Success in this endeavor depends very much on a teacher's questioning skills.

---

[1] Taba, Cooperative Research Project No. 2404, *op. cit.*

SUPPORTING QUESTIONS AND ROLES

The sequence for each discussion strategy (Chapter 5) suggests a set of questions framed to move the discussion through a series of steps. However, no particular set of questions alone will meet the needs of every discussion. As the teacher "reads" the feedback from the students he must, on his feet, provide supporting questions and assume a variety of roles. The excerpt below shows a teacher who asked the critical question that elicited an important idea from a child. The discussion was taped in a second-grade classroom.

Child: It says in this book that the moon is 250,000 miles from the earth but on the record it says it is 240,000 miles.

Teacher: Do you have any idea why these two different figures might have been given?

Child: Maybe the book was written after the record was made.

Teacher: What difference would that make?

Child: Well, people study all the time and the longer people study the more you learn about things.

While not an explanation for the difference between the two figures the response of the child to the crucial question, "What difference would that make?" revealed his thinking and contributed a new idea to the class—the accumulation of knowledge.

Teachers often assign adult logic to a child's response. Only by being sensitive to the fact that one cannot presume to understand another's line of thinking unless he reveals it will the teacher be alert to the points at which it is critical he ask for explanation. The following excerpt which illustrates this point was taped in a second grade.

Teacher: When you look at our list of things we buy at the supermarket, are there some things you would group together?

Child: I'd put potatoes and carrots together.

Teacher: What makes you think potatoes and carrots belong together?

Child: Because you peel both of them with a knife.

Some teachers might have assumed that the child in this sequence was grouping by class—food—while in fact the child was operating on a very different level, but one that is not unusual in seven-year-olds. "Reading the feedback" requires knowledge of both children and subject matter, alertness

to possible new insights or misconceptions, sensitivity to the length of time one can "hang in" with one child. Such skills make the teacher indispensable in classroom discussions.

We have examined the opening question and lifting questions which move the discussion from one step to another. Supporting questions are important too, however, for they call for clarification, extension, and synthesis of ideas as well as participation, flexibility, and emotional support of individuals. Supporting questions or statements may be formulated by the teacher or by the student.

The role of the clarifier is essential to good discussions. There are several ways to phrase supporting kinds of questions that clarify. Students rarely ask for clarification. It seems that they are so accustomed to hearing words they do not understand that they rarely seek to understand what is being said. Often the teacher who asks, "Could you give me an example?" or "Could you tell us a little more about what you have in mind?" does so in order to reduce an abstract term that has been used by one student to more specific terms that can be understood by the total class. Again, a request for clarification may be necessary with the highly verbal student who uses terms he does not entirely understand or who makes statements for which he has little factual basis. By setting an example, a teacher can encourage his students to ask each other more often, "What does it mean?" or "What do you mean by that?"

The role of the synthesizer becomes quite important in the interpretation of a large body of data. A teacher who sees the need for synthesizing a number of ideas in a discussion might ask, "Can you put that into fewer words?" or "Can you do something about that rather long response?" Some students seem to develop into synthesizers at a very early age. That is, synthesizing appears to be part of their style of thinking, and one can see evidence of it even in the early primary grades. The teacher should encourage *all* students, however, to synthesize.

Another role, which is usually assumed by the teacher, but is sometimes taken by the students when there is a good climate in the classroom, is that of offering support to a member of the class. This is the kind of support one gives to a student who is being attacked by other students, or to a student whose offering has been rejected, or because of a characteristic uncertainty and inarticulateness. Suppose, for example, that the students are planning a project and one says, "Well, you can't depend on Bill because he's never on time." In this case, if the teacher can put the problem into a larger context by saying, "This is something we all need to work on, isn't it?" it helps all the students, especially Bill.

A student who gives incorrect information is usually in need of support. In this case, the teacher should assume the role of supporter by helping the student arrive at a correction. If a student has a misconception, the teacher may take steps to help him correct his own error. Both the student and the class must operate with correct information, but the student must be helped to correct his errors on his own. In supporting the child who gives irrelevant information, the teacher needs to

1. find some way of making it comfortable for that child to reenter the discussion so that he does not feel left out, and
2. at the same time prevent the irrelevant remark from causing the discussion to lose its focus.

Students often change the focus of a topic by adding a new dimension. If the teacher is alert to this, he can support the student and extend the discussion at the same time. As he recognizes the initiator he can say, "John has another idea. Let's talk about it for a bit." When a student suggests a new dimension the teacher must quickly assess whether the majority of the class is ready to move in this new direction. If the students are not ready, they tend to hold on to contributions they did not yet have a chance to offer. If, as the discussion continues, the students' responses refer to an earlier question, the teacher may be assured that he has changed the focus too quickly. If he feels that the class is not ready to move to a new dimension, he might ask the student who initiated the change to bring up his point later. Then the teacher should make certain that the student is given an opportunity to do so, otherwise the brushoff will be recognized, and the student will tend to avoid any further ones by keeping quiet.

A second result of changing the discussion focus too soon is a "ragged" discussion. This happens when the teacher sets the focus and raises the level of the discussion, and then somebody changes the focus and the class will often start all over again at the fact level. In this case there is no *gradual* building of the discussion. Any discussion will have a certain number of "drops" to a lower level (either because a student makes a fact-level statement at an inappropriate point or because the group needs more facts), but if it happens often, the teacher may find that it is because he is changing focus too soon.

One kind of supporting question a teacher can ask to prevent a premature change of focus is an extending question. A teacher can ask the students to give examples of something someone else has said. This keeps the discussion at the same level by extending it, broadens participation, and allows the teacher to see if the class understands the topic being discussed.

Often the students who will rarely initiate new dimensions of a topic can extend the thinking of others.

One goal of a productive discussion is to help students learn to become increasingly aware of what other students say and to build on their offerings. There are several ways of working toward this goal. One way is through the physical arrangement of the room. If students sit in a circle where they can see everyone, they are more likely to enter into pupil-pupil dialogue. Another way is to ask questions that invite children to add to what others have said, to have another point of view, and to remain alert to what others are saying.

Taba taped several discussions in one second grade.[2] At first, not a single student referred to anything another student had said. In the last discussion that was taped, there were 16 references to the content of the responses of others. This result could have been accounted for by the practice they were given in being alert to the contributions of others.

As they mature, students must become less dependent on adults as the final authority, as the sole dispensers of rewards and support. This is why a teacher must try to make his students feel comfortable about disagreeing with him and with other students; this is why he must provide many opportunities to deal with topics in an open-ended fashion. Each time a student corrects his own error and each time he deals effectively with a situation in which there is no particular right answer, he is becoming increasingly autonomous. When a student says, "Isn't that right, Mr. Smith?" Mr. Smith must decide whether the student needs support, or whether this is the time to help him become increasingly autonomous by encouraging him to state his view and his reasons for thinking so.

In discussions, students usually follow the teacher's lead (that is, if the teacher asks for a fact, they give him a fact, and so on); thus, the teacher tends to set the ceiling on the level of responses that are given. This is a tremendous responsibility for the teacher. The kinds of questions a teacher asks affect the "height" of that ceiling in discussions. But another equally important factor affecting the "height" of the ceiling is classroom climate. If the climate in a classroom is such that the rewards and smiles go to the conforming thinker, discussions in this classroom will soon reflect this kind of "thinking." Even though a teacher may give his students the opportunity to work with an open-ended question, they may still be fearful of saying anything other than what they think the teacher wants to hear.

---

[2] *Ibid.*

So, in addition to being a skillful questioner, the teacher must create a comfortable classroom climate in order for the Taba teaching strategies to bear results.

SELF-EVALUATION BY STUDENTS

If one of our goals is to encourage the student to become autonomous in his thinking, we need to consider how we can help him become critical of the products of his thinking. To the degree that his maturity permits, he should be encouraged to discover the criteria on which his thinking is being evaluated, judge the reasonableness of the criteria, and become self-critical in his judgment of the inferences, generalizations, and predictions he makes. The student's insight need not be limited to an understanding of why a teacher asks a particular question, such as "What would be necessary in order for this to happen?," but should also include an understanding of what is gained when many small groups exchange information or when a person organizes a large volume of information before trying to generalize from it.

Evaluation by students need not be conducted in separate, formal sessions. Rather, experience indicates that students' evaluation is more effective and less tedious when it is frequent and informal. Students need frequent opportunities to focus on the strength or weakness of their generalizations or to examine the way they have used a particular chart.

The remainder of this chapter is broken down into sections, each headed by a question students need to learn to ask themselves in evaluating their own thinking. Several sequences from classroom discussions (either taped or observed) are presented in order to illustrate how a teacher can help his students become more proficient in their evaluation.

Are My Thoughts Well-Organized?

The following episode took place in a third grade class in the first month of the school year. The classroom population was heterogeneous. After viewing a film about Eskimos of Central Canada, the students were asked to list the items that Central Eskimos took to the trading post and the items they got from the trading post. The information was organized on the chalkboard in the following manner.

Central Eskimo took	*Central Eskimo got*
Skins	Guns
Carvings	Ammunition
Etc.	Tea
	Knives
	Etc.

The teacher then asked the class to suggest a title for the chart. One student offered "What Eskimos Need". The class accepted this as an adequate title. The teacher wrote the title on the chart but then asked each student to look carefully at the chart, think about it, and see whether he could improve on the title. If he felt he could improve on the title, he was to write his idea on paper. Six of the 20 students suggested significantly more discriminating titles, such as "Trading," "Exchanging Things," and "Eskimos and White Men Trading." Discussion with one of the eight-year olds gave insight into his thinking:

Observer: How did you happen to decide the title should be changed?

Student: Well, really, it was only right for one side of the chart. It was wrong for the things the Eskimos already had. The chart is about "changing" things.

Observer: What do you mean by "changing" things?

Student: You give what you have to someone and he gives you what he has, but you both know what they're worth.

Observer: I think the word used is "exchanging".

Student: I guess I've heard that word some time.

It should be remembered that students do not discover words, but rather *concepts*. If a student has a concept in mind, a teacher should not hesitate to give him the word. However, emphasis should be on the concept, rather than on the vocabulary.

Students can become aware of the organizing power of labels and titles through performing grouping and labeling activities. For example, if

they have three lists labeled "Fruit," "Vegetables," and "Food," they need to be aware that subsuming the first two labels under the third one would be the most efficient way of organizing the information. An awareness of this "higher order of things" allows students to apply the critierion of abstractness in evaluating the organization of material in their notebooks, their arrangement of data on charts, and their selection of titles for stories, pictures, or bulletin boards.

Are My Thoughts on Focus?

Students need many opportunities to consider whether their groupings are appropriate to the question, that is, whether they are on focus. For example, a fourth-grade class had taken a walk to see how land was used. After they returned to the classroom, they listed what they had seen, grouped the items, then named their groups. The groups were labeled "Recreation," "Transportation," "Housing," and "Islands." No one in the class objected to the "Islands" group, so the teacher directed their attention to it by saying, "Let's see how land is used. It's used for recreation, it's used fror transportation, it's used for housing, it's used for islands . . ." Immediately the students realized they had forgotten the focus of the question and they reconsidered what they should do about "Alcatraz" and "Treasure Island." It is important that both teacher and students remember the focus as the class evaluates the groupings they have made. In this situation, merely relating the groups to the question helped the students reject one grouping that was off focus.

Is My Thinking Appropriate to the Task?

Students need to be helped to see that grouping data is not an end in itself. The purpose of bringing order to a mass of information is to make the generalizing task easier. One teacher made this point by:

- Having the students list a great number of items they had seen in a film.
- Asking the students to generalize about the data.
- Asking them to group and label the items.
- Requesting the students to generalize again.

The students' attempts at generalizing about the unorganized data resulted in the listing of many specific items in their generalizations. They were much more satisfied with their second attempts.

A second teacher (of a fourth-grade class) wrote two generalizations on the chalkboard:

- California Indians used acorns, tules, and clay.
- California Indians used materials they found around them.

Teacher: What differences do you notice in these two statements?

Student: Well, one of the differences is that in the first you listed some words, but in the second you used the word "materials" and it's like a word that has a lot of little words inside it.

Teacher: What "little words" are inside "materials?"

Student: If we're talking about California Indians the little words could be acorns, tules, and clay, but if we're talking about the Forty-Niners it could be gold, logs, and water.

The student in this sequence did not use the term "abstractness" but showed that he was able to distinguish between concrete and abstract terms, as well as recognize that a term might be used from more than one point of view.

Are My Thoughts Precise?

It is generally safer to invent samples of generalizations for students to evaluate than to select poor generalizations made by the students. They often remember their contributions and may find it painful to have the class point out weaknesses. One of the more common weaknesses in generalizations is lack of precision. The sequence below shows a teacher's effort to encourage students to be precise. It also offers an example of divergent thinking. The sequence has been edited to show movement of thought in the shortest possible space.

Teacher: (Writes generalization on chalkboard.) Yesterday someone said, "People of the world need the products California grows and processes".

First Student: I'd say, "*Almost* everyone in the world . . ."

Teacher: Why do you think that would improve it?

First Student: Because like with oranges. Maybe like Florida, they don't need our oranges.

Teacher: Does anyone have a different opinion?

Second Student: Some, we could say some.

Third Student: Well, people in the world need our products that don't grow them themselves.

Teacher: What is Lorrie telling us when she says, "People who don't grow their products themselves"?

First Student: She's not saying just some, but if they don't have it.

Teacher: Yes, she's telling us which people need them. Let's look at the word "need". What do you think about the word "need?"

There followed a sequence in which many words were offered as substitutes for the word "need". They were accepted by the class until the third student said:

> Sometimes they do *need* it . . . maybe not *need* . . . but it might make them healthier and happier, and so I would still say that people who don't grow California products need them because it makes them healthier and happier.

Evaluating predictions involves the use of many of the criteria used in evaluating generalizations, that is, the students may make extravagant predictions which they would later recognize should be limited or made more precise. The students should be encouraged to examine their predictions by asking themselves such questions as, "Would this be true of all. . . .?" "Under what conditions would this happen?"

Do I Consider All the Possibilities in My Thinking?

One technique used by a number of teachers to encourage divergent thinking is first to record on the chalkboard a chain of events built by the students. For example:

Bedouin nomad loses camel market ——→ Stays in one place ——→ Needs new skills ——→ Learns to work at new job ——→ Needs different transportation ——→ More service stations for cars ——→ New jobs ——→ Etc.

The teacher then asks the students to look carefully and decide whether or not there is a point at which something else might have happened. Here, having the students work individually or in pairs results in a higher level of productivity and a greater number of suggested consequences of an event. Thus, the teacher and the students can determine the extent to which the class is able to explore several different possibilities.

Do I Use Other Information I Already Have?

If students are able to use information they already have in formulating new generalizations, they will be able to make richer and more complex generalizations than if they use only the data at hand. One teacher's technique for helping his students realize this was to have them think about the reasons he asked them certain questions. For example, he might say, "Do you remember yesterday when Billy said, 'Our state grows a variety of things.' And I said, 'Because. . . ?' *What was I trying to get Billy to do?*" In this example, the teacher tried to get his class to identify the cause/effect relationships that might make Billy's generalization more meaningful.

In the example below, the teacher tried to get his class to identify similarities between the situation at hand and one studied earlier. He said, "Yesterday when you made some statements about the Forty-Niners, I asked, 'Does that remind you of anyone else you have studied?' *What was I trying to get you to do?*" In both examples the teacher was trying to get the students to see the value of using outside information in processing data as well as the value of asking these kinds of questions.

Do I Evaluate My Own Thinking?

The following recap indicates the criteria students have discovered in examining several generalizations with their teacher.

Teacher: To end the discussion, could we say some things that are important when you're making big statements?

First Student: Putting things together in just one word—like "Topography" or "Climate".

Second Student: Comparing.

Third Student: By explaining more.

Fourth Student: Like someone would start a sentence and someone else would add onto it.

Fifth Student: Showing reasons why.

Sixth Student: We discussed what words really meant and if it's really true in that sentence.

Teacher: One thing more. A couple of times we said, "From what we know. . . " or "From what we learned . . ." What were we doing?

Seventh Student: We only learned about one part of the world.

Teacher: So what are we telling ourselves?

Seventh Student: We don't know all of it, just part of it.

SUMMARY

Helping students analyze the function of various thinking tasks is in reality "letting them in" on the criteria by which they can evaluate their own statements and judge the precision and power of their ideas. Evaluation exercises of this kind can be conducted in a variety of ways—as a class, in pairs, or individually; in formal sessions or informally and briefly in any discussion; verbally or by diagramming. Care should be taken that the contributions of all students are respected. As mentioned earlier, it is for this reason that invented samples of material to be evaluated are more appropriate in many situations. The effectiveness of such exercises can be observed when students spontaneously challenge overgeneralizations, whether found in books or generated by others around them, and when they in effect ask themselves, "How can I organize all this information I've gathered?" or "Does this statement really say what I meant it to say?" Hopefully students will attempt to improve their statements and to accept as inevitable the fact that there will always be exceptions to any generalizations they make.

This chapter has explained the variety of forms and functions of questioning in an inductively orientated social studies program. It has attempted to distinguish between mind-shrinking questions that tend to set students up to say exactly what the teacher wants them to say (a game like this is one that only a few students can play well) and questions that provide a setting and a stimulus for a student's own thinking.

In a curriculum which places considerable emphasis on the quality of the process that students use in constructing generalizations and inferences, questions play a key role. They will be handled best by teachers who are clear about the objectives of social studies activities and who listen carefully to student responses and give the students many opportunities to respond freely.

Chapter 7 THE DEVELOPMENT OF SKILLS

Teaching strategies and procedures represent only one part of what is involved in the total teaching act. Students cannot learn to think autonomously and productively or to conduct their own research without at the same time mastering certain academic and social skills. For instance, students need to know how to obtain and use information selectively if they are to use the many diverse materials that are recommended in this curriculum. Students will not benefit from presentation and exchange of the data obtained by committees in small group research if they lack the necessary skills for developing ideas through interaction with others in a group setting.

It cannot be assumed that students learn either academic or social skills automatically. Nor can it be assumed that these skills are mastered instantaneously. The development of these skills must be planned sequentially from unit to unit within each year's program and from year to year.

The Taba curriculum provides students with systematic opportunities in practical situations for developing a variety of skills. Through the questions that are asked and through the various activities included in the curriculum guides, students are helped to read selectively, to take notes, to interpret and make maps, and to read and make timelines, pictures, and charts. Students are also provided opportunities to work in committees, to engage in group research, and to participate in class discussions. Many opportunities also exist for learning to ask relevant questions, to organize information, and to develop individual and group plans for solving a variety of problems.

PRINCIPLES OF SKILL DEVELOPMENT

The skills developed in this curriculum are based on a number of general principles. These principles include the following ideas:

1. *Social studies skills are interdependent.* The mastery and effective utilization of any one skill requires the use of several others in the process. For example, selective use of diverse and multiple materials, a critical factor in developing autonomous learners, requires that students learn to use study questions as guides for locating relevant information rather than reading everything from beginning to end.

2. *Social studies skills need to be sequentially developed.* Most skills are too complex to be developed or acquired all at once. They must be developed in greater and greater precision from year to year throughout the grades. Simple levels of accomplishment, acceptable in the primary grades, need to be built up and refined to higher standards of proficiency as students grow older. Thus, whereas primary students may be expected to identify one or two important ideas related to a topic, older students can be expected to prepare, if appropriate, detailed outlines containing several key ideas logically arranged.

3. *Social studies skills are basically intellectual in nature and call for the use of cognitive processes.* In the past, some educators have had a tendency to view skill development as essentially the building up of such skills as handwriting, drawing, outlining, or notetaking. These skills were considered ends in themselves. In this curriculum, however, skills are, in general, viewed more as means than ends, and therefore, as contributors to the achievement of more essential goals such as the development of thinking skills, valuing, empathizing with others, and using information wisely. Thus, when students are asked to read maps, they are expected to interpret the information represented in the map in terms of the insights it gives about aspects of people's lives. When they are asked to write a report (or give one orally), they are expected to think about the content of what they are saying as well as the form in which they are saying it, so that the report makes sense intellectually as well as stylistically.

4. *Social studies skills usually consist of several subskills.* For example, learning to read selectively involves mastering such subskills as how to use an index and table of contents, to be aware of synonyms, to skim for pertinent data, to detect bias and opinion, and to react intelligently to an author's point(s).

5. *Social studies skills need to be appropriately reinforced.* Students need frequent opportunities to practice the skills that they are expected to use, and to receive corrective feedback about their efforts. This means that students need not only to know what is involved in a particular skill, but also what represents an adequate performance of the skill. Care must also be taken to ensure that students are not asked to perform tasks which are too far beyond their present level of development. This caution can be misinterpreted, however, and should be exercised judiciously, for when students learn to locate information selectively (e.g., through the use of the study questions included in the curriculum guides), they can often use material that in its entirety would be too difficult. An otherwise difficult text may be quite usable by even below average students if they have first established clearly what it is that they are looking for and if their interest has been aroused in what they are doing. Reading difficulties and difficulties in coping with complex relationships can often be overcome by raising interest levels and by the skillful use of questions (see Chapter 6).

6. *Social studies skills are interrelated with the objectives of knowledge; attitudes, feelings, and values; and thinking.* Trying to develop skills in isolation from any of these other objectives is impractical and psychologically unsound. Students need a wide variety of skills in order to acquire and use facts, concepts, and ideas, think intelligently, or empathize with the feelings of others. Another caution is in order here, however. Though skills, knowledge, attitudes, feelings, and values are interrelated, this does not mean that they are necessarily (though they may be) learned in the same way. As has been mentioned previously, therefore, different kinds of learning activities have been included in this curriculum in order to accomplish each of these objectives.

7. *Social studies skills are fundamental tools of learning.* Thinking, valuing, and the acquisition of knowledge are facilitated by the development of skills. Skills that are underdeveloped limit a student's knowledge, thinking, and attitudinal development. If students possess an inadequate repertoire of skills, they are handicapped in their work in social studies.

8. *Social studies skills need to be made meaningful to students.* This requires that teachers always make clear to students the purpose behind requirements for skill mastery. For example, if questions have been designed to help students develop the skill of interpreting information contained in graphic materials, it should be made clear to them how these questions will contribute to the development of this skill which in turn will help them achieve some of the important objectives of social studies. Otherwise, performance may, and probably will, be half-hearted and mediocre.

It is important to realize that social studies skills are learned by individuals who vary widely in ability. A variety of different ways by which different students can learn important skills, therefore, have been provided in this curriculum.

TYPES OF SKILLS

As was mentioned in Chapter 2, and pointed out again earlier in this chapter, skill development in this curriculum falls into two major categories—academic skills and social skills.

Academic skills include:

- *Reading* (books, articles, magazine excerpts, newspapers, reviews, appendices, and other printed matter).
- *Viewing* (films, filmstrips, pictures, transparencies, and the natural environment).
- *Listening* (to records, tapes, guest speakers, teachers, parents, and peers).
- *Outlining* (of information obtained from printed, oral, or visual sources).
- *Note-taking* (using study questions; during unstructured reading sessions; when the class exchanges information after a period of research; or upon listening to resource people. This involves in particular referring to a wide variety of source materials).
- *Making charts* (for example, of the kinds of products manufactured in a particular locality).
- *Reading and interpreting maps* (for example, noting where colonial towns were located during the seventeenth century and how the location of these towns affected, and were affected by, the natural environment).
- *Caption-writing and title-giving* (such as for bulletin board or other classroom displays in the primary grades).
- *Diagramming* (for example, of family structures in different cultures).
- *Tabulating* (for example, the opinions of class members expressed by means of written responses).
- *Constructing timelines* (for example, of significant events occurring or individuals living during a particular epoch).
- *Asking relevant questions* (of guest speakers and other sources). This involves realizing that different questions serve different purposes. For example, to ask "Who discovered America in 1492?" brings forth

but one answer and offers no insight into reasons. "Why did explorers set sail for unknown parts during the fifteenth century?" requests an explanation of why a certain series of events occurred.

Social skills include:

- *Planning with others* (for example, how to divide the tasks involved in preparing a group-written report, or how to decide who will search for answers to which of several study questions).
- *Participating in research projects* (such as a committee's effort to research a problem of common concern, or working in two- or three-man small groups to investigate a particular topic).
- *Participating productively in group discussions* (through developing confidence in one's ability to contribute ideas and information to others).
- *Responding courteously to the questions of others* (through learning to listen to what others are asking and then to respond appropriately).
- *Leading group discussions* (through learning how to ask appropriate questions, how to encourage others to speak, and how to refocus and clarify other responses).
- *Acting responsibly* (through estimating what the consequences of a given action may be and taking responsibility for those actions which one initiates).
- *Helping others* (through providing assistance when one has information which will make it easier for another to succeed in a given task).

THE DEVELOPMENT AND USE OF SKILLS

How are the above skills to be developed in a curriculum? The following are basic factors to consider:

Academic Skills

Students should have some general idea of how books are organized. The organization of a book is indicated by its table of contents. Students need to know about and be able to use this device. In addition, they need to realize that the index serves a different function. It not only indicates specific references within the text as a whole, but also gives references to pertinent maps, diagrams, and figures. Students who have learned how to

use the page references which follow index entries can find all the pertinent information on a given topic which a particular book contains. Realizing that different synonyms, such as farming and agriculture, may, in different indexes, be used to classify the same information is of further help. Sometimes the best way of developing these skills is through attempts to seek answers to real social studies problems.

Students need to know where different types of source materials may be obtained. Teachers should not take such knowledge for granted. In fact, if necessary, they should specifically instruct students in how to locate information in such sources as periodicals, government publications, and community resource files; how to use as resources films, filmstrips, slides, charts, posters, records, radio, and television; how to interview, observe, and survey; and what to look for and how to record data on field trips. Again each of these is best learned from the setting of a real problem rather than through what often amounts to an unreal disembodied exercise.

In our culture, reading is an essential skill for effective participation in school and life in general. Individuals must be helped to read as effectively and intelligently as their unique capabilities permit. Thus, opportunities for vocabulary development and enrichment (e.g., through being exposed to the usefulness of word-recognition techniques such as context clues, or known word elements such as prefixes and suffixes) must be provided. Students need to acquire additional meanings for words they already possess (such as cape, belt, source, level, and mouth), as well as acquire new words. Continual efforts should be made to relate words to events (or individuals) that students see or hear in pictures, films, filmstrips, or on records and tapes, as a part of their normal social studies program. They also need to learn how to read in different ways for different purposes. Thus, practice in skimming, reading to formulate questions to ask of a resource person, reading for details to answer study questions, and reflective reading for critical analysis, all need to be cultivated.

Different types of source materials need to be approached in different ways. Visual materials may require students to "look at" data differently from what they need to do when they are using printed or oral stimuli. Methods of using conventional text materials may be inappropriate for other printed matter. For example, while novels may reflect accurately the feelings of the characters of a particular time, they may distort the particulars described in the setting presented. Strictly factual accounts, on the other hand, may give no inkling of the affective mood of the times. Students need to know how to utilize such different types of materials. Used well, both can be fruitful sources of data about human behavior.

Students also need to develop their own schemes for organizing and connecting together information which they obtain. Since there is no single text around which the units in this curriculum are organized, a rather heavy burden is placed upon note taking and the preparation of individual notebooks. Such notebooks serve as "data banks" for retrieval purposes.

Students must also be able to express themselves clearly in writing. Practice in writing individual and group reports can help develop this skill. Assigning many short papers (one page or less in length, for example) is probably of more value in this regard than one large term report as a sort of cumulative activity. Here again, students need to be helped to avoid vague terms, to distinguish between statements of fact, inference, and judgment.

Further, students need to learn how to speak clearly, listen effectively, and observe carefully. Panel discussions, oral and written reports, interviewing opportunities, field trips, and role playing all can help in this regard. Opportunities for each should be provided throughout the grades. First-hand experiences like field trips need to be provided so as to clarify concepts of abstract terms and relationships (at the primary level, for example, the processes involved in operating a supermarket). Providing opportunities for students to listen is equally important, as is getting them to use the information they acquire by listening (guest speakers, records, tapes, radio, television, poetry read aloud—all are listening resources). Still further, students need to learn how to attend to, comprehend, and evaluate oral and written sources (for example, comparing and contrasting two or more speakers' comments on a given event or occurrence).

It is also important for students to develop a sense of place and space. Continual and frequent reference to maps and globes (e.g., through asking students to note directions, compute distances, locate places, and express relative location); explanation and use of scale and symbols, exposure to different kinds of projections; comparisons between different kinds of maps, and drawing inferences from maps—all are important. It should always be made clear to them that maps are to make inferences from and are not simply a device for collecting data.

Further, students need to develop a sense of time and chronology. Primary children can begin to develop a sense of time through the use of calendars, placing events in order of occurrence, using timelines to establish benchmarks in time, and relating dates to their personal life experiences. Older children can be exposed to a more in-depth study of a past culture in order to increase their sense of historical chronology, asked to make generalizations about time in terms of the development of social institutions, and then asked to apply their generalizations to new situations.

It is to be emphasized again that the above skills, though important in their own right, are primarily considered in this curriculum as means rather than ends. Their essential purpose is to contribute to the accomplishment of the more important goals identified in Chapter 2, and the best setting for their development seems to be as a part of the normal data-gathering and problem-solving activities in social studies.

Social Skills

Social skills involve a concern for, and interaction with, other people. They are much broader in scope than academic skills and, accordingly, more difficult but, of course, no less important to implement. Social skills involve both facts and feelings; they are rarely learned completely and forever but continue to be developed throughout an individual's lifetime. As in the case of academic skills, however, certain factors are basic in developing these skills throughout a curriculum. Their purpose is to facilitate and to consolidate understanding of human behavior rather than to develop well-behaved students.

Students need to be helped to identify with others in situations different from their own, to empathize with others' concerns, to "feel" similarly, and to see things from another's point of view. They may learn to do this by identifying how individuals in other cultures might feel in a conflict situation, or by role playing individuals trying to decide how to deal with a particular problem with which they are faced.

Students need to be helped to examine as best they can their own feelings, sensitivities, and values in order to understand themselves as thoroughly and honestly as possible (e.g., by writing essays on topics like "What Makes Me Angry or Happy," through reacting and responding to other's opinions and others' critiques of their work, and by revising such work accordingly when appropriate).

Students should be expected to assume responsibility for actions which they initiate (for example, they should be able to plan with others, decide who will perform certain tasks, and accept specific responsibilities on a group research project or committee investigation).

Students need to be helped to avoid using stereotypes as a means of classifying individuals (e.g., by learning to recognize and analyze propaganda techniques; by learning to distinguish between factual reports, inferences, and value judgements; and by learning, as emphasized in the curriculum, that people in different cultures are individuals with unique perceptions and desires).

Students need to learn how to work effectively with others as members of a group (e.g., through participating in panel and classroom discussions, group research projects, committee work, and two- or three-man team efforts). By so doing they are learning both to practice some of the important behavioral objectives of social studies and to learn the means of developing greater insights into the behavior of others and of themselves.

The Sequential Development of Skills

The skills described above are too complex to be acquired at once. They must be sequentially developed through each year's program. Special consideration must be given to the varying abilities among students within a particular class, and the degree of readiness which can be expected among these students. Thus, systematic provisions for a variety of incremental learnings within different student levels of attainment must be provided if all students are to be sufficiently challenged.

This curriculum provides such systematic incremental opportunities for the development of skills. The development of map skills, for example, begins in the first grade with the making of a relief map showing the places where family members go to work.

This initial map activity is important in many respects. First, the teacher has the opportunity to guide the pupils as they note size, relative position of objects, and relative distance. Through this activity and others, the students gradually develop a capacity for later symbolic representation and for precision in the use of map scales, as well as a habit of recognizing that maps can be used to help them understand something of why people behave the way they do.

Second, students are provided experience with map work on a horizontal surface before they begin to use maps on a vertical surface. Vertical maps should generally not be used before students have established the cardinal directions for themselves in relationship to the sun and have begun to use the words "north," "south," "east," and "west." They should have clearly in mind that down is toward the center of the earth and that up is away from the earth. Even after these concepts have been dealt with, students may need to repeat mapping activities similar to this initial one if they seem to confuse north with up and south with down when using maps on a vertical surface.

Third, the making of a relief map prepares students to use map symbols. A three-dimensional model is far less abstract than the symbols pupils will eventually use (such as a blue line to represent a river). However, three-dimensional models should not be used before children have observed

the objects which the models represent. At all grade levels, models and map symbols should be used only after students have had experiences with the appropriate images which these symbols represent. When observation is impossible, pictures, slides, or films should be used to supply this mental imagery. It should be noted here that too much time can be spent on model-making and too little time on using models to gain insights about people.

At the second-grade level, the same skills are practiced, but in a slightly more complex manner. For example, a simple picture map of the block on which the school is located is prepared. This activity is a bit more complex and detailed than was the first-grade activity of making a relief map. Here the children begin initial work with map interpretation as well as map reading. (For example, they determine why certain items are given space in close proximity to others.) The major streets of a business section in a community are plotted, and a replica of the homes and landmarks in their neighborhood is made. This replica serves as a model to use in planning a map of the community. The idea of using map symbols is introduced, and the usefulness of maps as a means of finding out some of the reasons why people behave as they do is appreciated.

In the third grade, there are many considerations of natural-cultural relations as students draw inferences about the ways of life of people in different kinds of communities around the world. In addition to flat maps of the world, a global model of the earth is often used for locating communities in their proper regions, for locating the equator and Arctic Circle, and for locating climatic areas.

Map work at the fourth-grade level includes making maps from pictures, extending the use of map symbols, and contrasting different kinds of maps. Map interpretation as well as map reading is stressed as pupils locate cities and draw inferences about reasons for the growth of cities in their particular localities. Physical features of the landscape are defined and located, topography is described, and relief maps are compared to flat maps. Political maps are studied and comparisons are made between sizes of areas, such as states of the United States, and of the various consequences these features have for human beings.

There is further emphasis upon map interpretation as well as map reading at the fifth-grade level. For example, as the pupils locate places where immigrants settled, they are asked to use maps to hypothesize what might have happened should the immigrants have settled elsewhere, or as the pupils trace the routes of explorers, they draw conclusions from maps about the reasons why explorers followed or developed a particular trail. Other map work includes the contrasting of a fifteenth-century map with one

of today; measuring distance on maps; observing similar features of topography between the United States and Canada; discussing population distribution relative to latitude; and using globes to show the position of North America in relation to the rest of the world.

At the sixth-grade level, map work includes using maps for locating peoples of the world, for making inferences as to the routes they might have taken, for comparisons of land forms and of land use among countries, for further inferring, and for getting information of drainage systems from highland and plains areas. Special maps are developed such as rainfall maps or land use maps for a particular country, and are used as a means for presenting information to the class.

In the seventh grade, map work includes identifying the location of certain ancient civilizations and empires; plotting trade routes and military campaigns; using maps to make inferences about the spread of religious ideas; predicting colony sites; and for hypothesizing about where early man might have lived or what would have been necessary to hold various political entities together. Other work involves making different kinds of maps to illustrate the interaction of man and his environment, and using maps in individual and group reports.

In the eighth grade, maps are used primarily as a source of information which may be interpreted in terms of its significance to the people of the period: predictions as to the modifications Indians would have to make as they were forced to move to different environments; the relationship between the "grain of the land" and the movement of people; the movement of frontier lines and the center of population; and predictions of the probable results of contrasting land areas and population density in neighboring colonies of different colonial powers. Committees are also encouraged to use maps and graphs as visual aids as they exchange information with other groups.

Similar sequential steps are followed in the development of other skills. For example, note taking begins in the first grade with simple charts, such as "things to remember." Note-taking skills then progress in complexity as pupils organize information from several sources, including books, filmstrips, records, and interviews. By the time students reach the eighth grade, they are expected to develop complex charts, prepare detailed outlines, interpret bar and graph statistics, and prepare critical reviews and reports. As a second example, the use of timelines begins in the first grade with the making of a family tree and a butcher paper chart divided into two sections ("Long Ago" and "Now"). By the time the students reach the sixth grade, they have prepared a complex three-way timeline on which they

record parallel events in Middle and South America, Europe, and the United States in a manner that represents the time span of events in accurate proportional distances. In the eighth grade, such timelines are used to explain, in part, matters such as the relationship between early attempts at colonization and the later advent of American independence.

ORGANIZING THE CLASS

Class organization is a necessary consideration if the curriculum described herein (and its components—skills, knowledge, attitudes, feelings, values, and thinking) is to be implemented successfully. Different types of tasks require different types of organization (e.g., whether the class should work as a whole, in small groups of threes and fours, in pairs, or as individuals). The problem is one of deciding when each type is appropriate. In general, tasks that require the development of procedures, ideas, or standards are more effectively accomplished by interaction of the whole class. Tasks which require that varied materials be covered by the same procedure can usually be done more economically through parallel study by small groups. Tasks which require a specific piece of research, such as analyzing a set of data or expressing ideas in writing, can best be accomplished individually.

At the outset of instruction, it is usually advantageous to work with the class as a whole. Working procedures can be established to provide the total group with a common understanding of what is expected and how it should be done. When these procedures have been established, then the class can be broken down into small working groups.

Working in small groups offers distinct advantages. In small-group work, students have a greater opportunity for interaction and participation as well as a chance to assume more responsibilities. There is valuable "talking time" in which students can clarify the meaning of various concepts and generalizations which they and their classmates use. Opportunities exist for students to challenge and correct one another.

Another advantage of small-group work is that it provides a means by which more content can be covered efficiently and in depth. For example, in a study of Middle and South America in the sixth grade, different groups can answer the same questions but with reference to a different country. This method of studying provides more material for comparing and contrasting without increasing the amount of basic work involved in locating data and organizing details into a coherent picture. A greater amount of comparable material, once organized and interpreted, affords students an opportunity to extend generalizations and to enlarge concepts.

Furthermore, working in small groups affords many opportunities for teachers to deal with individual differences since it frees the teacher from having to treat the class as a single group. Small-group settings give teachers a greater opportunity to listen, to observe, and to tailor responsibilities to meet unique student needs, interests, and abilities. As always, however, the teacher must make sure that all groups have a clear conception of what they have undertaken, and how they are to proceed. One of the disadvantages to be guarded against in small-group work is that the students can easily lose sight of objectives or wander off the point. Teacher supervision of them is necessarily uneven so that in the early stages, at least, brief small-group discussions need to be interspersed with whole class rule-reminding and refocussing sessions, summaries, and sharing.

When the class again comes together after a period of small-group research, information from all groups can be organized, compared, and contrasted. Students gain in three ways—through participating in research in their own group; through obtaining information given by other groups; and through extending concepts and generalizations (by comparing data supplied by the other groups which have studied the same problem and followed the same questions, but for a different area of content).

The following are some additional and more specific suggestions for class organization:

1. Work through one example with the total class to establish working procedures before starting committee work.
2. Start one small group at a time if the class lacks experience in working in groups.
3. Give each group responsibility for a different content area but, if at all possible, ask them to study the same questions.
4. Arrange for an exchange of information through reports from each group to the entire class.
5. Help the total class to organize the information from each group (see Chapter 4).
6. Arrange for students to summarize information through the use of a variety of media, visual as well as verbal.
7. Provide opportunities by which the information which groups exchanged can be compared and contrasted, and inferences drawn.
8. Provide for a variety of ability and skill levels in each group.
9. See that each pupil has new experiences both in areas where he lacks strength and where he is skilled.

10. Change group membership periodically.
11. See that every group possesses both leaders and followers.

SUMMARY

Academic and social skills need to be developed in parallel to the various thinking skills and in conjunction with the development of knowledge, attitudes, and values. They are essentially means to ends but no less important for this. Without systematic and planned development, the objectives of social studies cannot be attained. They cannot therefore be left to emerge incidentally to other social studies activities. On the other hand, they must never be given the kind of emphasis which causes them to overshadow the development of the complex thinking skills, knowledge, and attitudes they are supposed to enhance.

Chapter 8 EVALUATING STUDENT PROGRESS

This chapter is aimed at helping teachers to maintain a consistent emphasis on important social studies objectives throughout their programs. Carefully constructed tests, check lists, observation schedules, and the like are crucial for this purpose. It has long been held that without suitable means of checking students' progress toward the key objectives of a social studies program, that program will quickly get off course.[1] The possibility of its ultimate success will be as chancy as was that of the passengers whose pilot said, "We are lost but we're making good time."

The particular difficulty which it is hoped will be at least partly solved by this chapter is the one teachers must face when, on the one hand, they are told of the high level of expert knowledge needed to construct adequate multiple-choice tests and, on the other, the great difficulty most teachers have in being objective enough in their assessment of their students' essay, paragraph, or sentence responses.

It was primarily in response to the need to provide teachers with better means than most of them have at present of making objective judgments about everyday written and oral responses from typical social studies activities that detailed evaluation exercises were built into the latest edition of the Taba curriculum.

This chapter is particularly concerned with showing how to make objective assessments of the effectiveness with which students group together and label items, and other sentences, paragraphs, and essays students write

[1] Hilda Taba and R. W. Tyler, in E. R. Smith and R. W. Tyler, *Appraising and Recording Student Progress*, New York: Harper, 1942.

in response to such statements as, "Tell me in one sentence the most important ideas you have got from what we have been studying," and "Can you give me a title for the story you have been reading?" It is also concerned with helping teachers to develop check lists for evaluating students' murals and maps, their role playing, and their dramatic exercises, and to provide teachers with means of evaluating the attitudes, feelings, and values students reveal in their reactions to the relevant question sequences in the teacher's guides.

As a preliminary to these details, first a word or two about the general principles teachers might follow in making judgments about student responses to their questions and about ways in which results can be recorded and thus used to improve the social studies program.

GROUPING RESPONSES AND RECORDING RESULTS

Experience has shown that once a teacher has a clear set of criteria with which to work, it is possible for him to evaluate students' responses with a degree of precision which is quite appropriate to the kind of answers given to the questions typically posed in this curriculum.

The simplest procedure for using these criteria is to apply one at a time and to sort responses according to that criterion into as many groups as seem to be appropriate to the occasion. Thus, if students in a sixth-grade class are asked to sum up in one sentence the important ideas about Spanish settlement that they have gained from their reading and if a criterion of *Inclusiveness* is used, it should be possible to place in one group all those responses which include the important (predetermined by the teacher) ideas that may be derived from the data studied. A second group may be made of those responses from which one important idea is omitted, then a another of those from which two important ideas are omitted, and finally the rest which might include those with only one item or no accurate items included.

A second criterion, say of *Abstractness*, may then be applied to all the responses by, for example, placing in one group all those containing two or more accurate abstract terms, placing those containing one such term in the next group, and the rest in a third group. Other criteria may be applied as appropriate.

If a single overall ranking of students on all criteria is wanted, then a top group could be made up of those who are in top groups on *all* criteria and the rest of the students could be placed in groups with similar levels of responses overall. Alternatively, a score can be given for the group each

individual falls in on each criterion, with the total score used to either rank or group students.

By following a procedure of this kind it is possible to group the individuals of a particular class into three or more subgroups on single and/or combined criteria and thereby attain a level of precision which, if applied over a number of exercises during the year, is quite suitable for diagnostic and remedial purposes in social studies.

The first major step in all of this is clearly to know what objectives are sought from a particular lesson or lesson series, to list them, and from the list to set up criteria[2] against which behaviors of different kinds may be measured. Then an individual's response to a particular exercise can be evaluated either as a score or a level as described above. Responses can also be grouped on a purely descriptive basis. In this case a student is categorized in terms of the kind of response he has made without any associated qualitative assessment given it. A procedure based on descriptive rather than qualitative criteria is particularly appropriate when the question of which is the better response is difficult to gauge. (See the following listing, grouping, labeling exercises in which it is difficult to decide whether or not a *class* response is better than a *descriptive* response.)

When records have been kept over a period of time of the kinds of responses students are giving to various questions asked in this curriculum, then it becomes possible to assess:

- The relative status of individual students in a class in relation to a particular objective at a particular time.
- Changes in the kind and quality of students' responses to similar exercises given at different points in time.
- Changes in style and/or quality of total class responses to similar exercises given at different points in time;
- The relative status of both the individuals in a class and the whole class, to other individuals and other classes.

A continuing record of individual and class performance can then be used as feedback for modifying the program and for instituting remedial or other kinds of procedures to correct errors or to accelerate the development of appropriate knowledge, thinking skills, or attitudes. One way of recording

---

[2] For example, having decided that one objective is to have students analyze the important ideas about human behavior in what they have read, their summary sentences might have criteria of *Inclusiveness*, *Abstractness*, and *Ethnocentrism* applied to them. See p. 145 for examples of these.

progress is in the form of a list of individual names with several columns set against them, with each column headed by the labels for some of the key evaluation criteria used in the exercises. Against each student's name could be noted the group into which his responses to a particular exercise place him. A vertical total on each criterion can give the picture of the class's status in relation to that criterion while a horizontal reading can trace the progress of each student over a series of exercises in relation to each criterion. Each column should be wide enough to allow for several entries for each criterion for each student (see Chart 14).

CHART 14

	Criteria																											
Name	*Inclusiveness*						*Abstractness*						*Ethnocentrism*						*Decentering*						*Flexibility, etc.*					
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
John Anderson																														
Clive Apter																														
Brian Benson																														
Cathy Clifford																														

The different evaluation exercises suggested in the Teacher's Guides for the Taba Curriculum can be grouped according to whether they are primarily concerned with thinking skills, or attitudes, feelings, and values, or academic and social skills. As will be seen in what follows, these groups are not mutually exclusive. Each exercise will be found to provide opportunities for measuring more than one of the objectives of this curriculum.

EVALUATION OF CONCEPT DEVELOPMENT EXERCISES

1. Rationale

Responses to questions typically used in this kind of exercise may be from individuals, small groups, or the whole class and may be in either written or oral form (the latter can be taped, recorded on the chalk board, or in some other way noted by the teacher). No matter what method is used to record

responses, an important requirement of this type of exercise is the encouragement a teacher gives the students to respond freely and frankly rather than in a predetermined way or with some kind of pressure to produce "right" answers. Unless this is done the evaluation procedure is likely to focus on a student's capacity to discover what the teacher wants him to say rather than on the spontaneous reactions which it is hoped will reflect the level of cognitive ability or cognitive style of a particular student. This kind of exercise can, of course, only be an indirect measure of thinking but, provided the setting is carefully arranged and unreliability carefully guarded against, it is likely to give teachers useful evaluation data which they can use to improve student performance.

The initial question typically asked in this exercise is, "What did you see or hear?" This can provide measures of both the range and kind of the students' perceptions of the experience they have just had. These can be scored for the number of different responses given (i.e., range) as well as for the kinds of items mentioned. In the latter case a teacher may feel the need either to take immediate steps (e.g., by asking further questions) to encourage additional kinds of reactions (e.g., often the feelings displayed by the people in a story are overlooked) or to note any serious deficiencies for later remedial action.

For example, at the sixth-grade level an important objective for students is that, when asked, they list a number of items about the people and the environment of Middle and South America; then they are expected to group the items and assign logically defensible and conceptually powerful (that is abstract) labels; and when requested, they are expected to re-form and re-label the items in equally defensible ways. The responses to the grouping and labeling activities need to be first recorded and then classified in terms of what seem to be the thinking processes involved. If the groups that are made and the labels given these groups are recorded individually,[3] as well as the students' reasons for so ordering them, then the teacher may judge whether they can be classified as:

a) *Functional or locational.* Items are grouped on the basis of an individual's own personal experience because he has, perhaps, seen them together (and he says that is why he grouped them), because those things happened to him, or because he knows someone to whom they happened. That is, responses are narrowly subjective and egocentric.

---

[3] The same criteria may also be applied to whole class responses taped or written on the chalkboard.

b) *Descriptive.* In this case, items are grouped on the basis of color, form, or texture. That is, they are grouped on an objective characteristic that is amenable to the senses (touched, tasted seen, smelt, or heard).

c) *Class.* Category items are grouped because they fit into a class and the label refers to a characteristic which is not observable in any one item but which can be inferred for all of them, e.g., because all have to do with *concerns.*

d) *Mixed.* A group starts to be formed on the basis of one criterion and then is perversely changed to another, as for example, when an item is matched to the previous one rather than to the principle on which the group was originally formed, e.g., black, white (because they are colors), snow (because it also is white).

e) *Flexibility.* When pupils are asked, "Are there any other ways in which we could group items?," it is also possible through noting the number of changes that are made to groups and labels to record responses under a criterion of *Flexibility.*

The lower the grade, the more likely there is to be a higher proportion of *Functional* and *Mixed* than of other groups and the less likely there is to be much evidence of *Flexibility*, it is possible, however, by encouraging students to group in new ways, to develop greater flexibility at all grade levels as well as a greater variety of categories and a greater use of the more inclusive and abstract, class-type labels.

f) *Abstractness.* It is also possible to categorize labels for groups on a single criterion of *Abstractness.* The principles involved in this procedure are discussed in the next section on generalizing.

2. Examples

a) *Functional or locational.* "I would put the *Andes mountains* together with the *Amazon River* because I once read of a man who travelled up the river, then climbed over the mountains to the West Coast." (Note that the grouping is based on personal experience.) "I would put *Venezuela* and *Brazil* together because they are next to each other on the map in my atlas." (Note that the grouping is based on physical association in *his* atlas.)

b) *Descriptive.* "I would put *bolero* and *saddles* together because they are made of leather." (Note that the criterion is the common material.) "I would put the churches and houses together because they are both made of brown adobe." (Note that both material and color are the criteria.)

c) *Class.* "I would put *llamas* and *horses* together because they are animals; and *canoes* and *log rafts* because they are both for transportation. (Note that the label in each case applies to a class of items and that it has no tangible features in itself.)

d) *Mixed.* A descriptive-type group consisting of *boleros*, *saddles*, *harness*, would become mixed if *horses* was added, ". . . because you put a *harness on a horse*" (i.e., for a locational-type reason which links the last two but not the others).

e) *Flexibility.* A student who notes that *llamas* can go into the animal grouping as well as into the textiles group (since they produce wool) would get a point for recognizing this multiple classification of a single item. He would also get a point for noting that *river* can be linked with *sea* and *lake* as well as with *road* and *railway* (because all provide transportation).

f) *Abstractness.* Labels may also be classified on a concrete—abstract criterion. In some instances, it may be possible to form only two groups, e.g., *water* (as the label for Atlantic, Amazon, Caribbean), *wool* (as the label for llama, sheep, goats) in the concrete group and *exports* (oil, beef, sugar) and *cultures* (Indian, Spanish, Portuguese) in the abstract group.

On other occasions it may be possible to distinguish a third group made up of a highly abstract group, e.g., *concerns*, or *attitudes*, or *conflicts* or *political instability*; a less abstract one made up of labels like *food*, *transportation*, *races*, and a more concrete group as above.

EVALUATION OF GENERALIZING EXERCISES[4]

1. Rationale

There are many occasions in this curriculum when students are given a detailed set of facts from which they are asked to develop valid generalizations. A similar process is involved when they are asked to suggest a title to a story or a chart. Such generalizations may stem from the data within a particular story or situation, in which case they may be asked for following a grouping and labeling exercise, or they may arise out of comparisons between two or more different samples of information (e.g., the food-gathering practices of the Eskimoes and the Bedouin), which could lead to a

[4] Since inferences are a form of generalization, they may also be included in this evaluation procedure.

single generalization about the two. The principal criteria which may be used to group responses for evaluation purposes are:

a) *Inclusiveness.* This involves the extent to which all those important items which have been decided on by the teacher prior to the exercise have been included in the sentence generalizations or titles. The best responses according to this criterion must not only include all important ideas but must, of course, be accurate. See examples of these and other criteria in the next section.

b) *Abstractness.* When a student is asked to sum up the important ideas in what he is studying he is likely to encompass a greater range of ideas if he uses a high incidence of abstract words in his response. To be abstract, a word must refer to a quality or condition without tangible elements, e.g., "living conditions," "values," "pleasures," "concerns."

c) *Tentativeness.* This is a quality in responses which is particularly desirable when it is in a form showing that a student recognizes the necessary limitations that his data place on any conclusions. Loban (1964) refers to it as a characteristic of those who are skillful with words and ideas and who therefore recognize the need for a reasonable and decent qualification to all conclusions which are based on incomplete data. Such is the case in most situations in social studies in which generalizations are called for. Indicators of this quality are such words and phrases as, "From what we read it seems that . . ." "probably," "might," and "It is likely that . . ."

d) *Comparison.* This is a criterion for classifying those aspects of a generalization which give evidence of a spontaneous comparing between the people in the particular experience and others the students know of, including themselves. In a case like this, an inference is made which involves taking a mental step away from that which is close at hand and obvious and the relationships contained therein, to that which is less obvious and more complex. Those students who make spontaneous comparisons are giving evidence of a mental flexibility which is as desirable in a generalization as it is in the grouping and labeling aspects of the concept development exercise.

e) *Ethnocentrism.* This refers to the tendency to assume that one's own group (social, religious, etc.) has the "right answers" and that different values, life styles, etc., are inferior. In a curriculum which places considerable importance on the understanding of others and of oneself, this particular criterion is obviously a crucial one. Some activities, of course, provide greater possibilities for evaluation on this criterion than do others. In specific comparisons between life in other cultures and that of the students, there should be plenty of opportunity to use this criterion. On the whole, the division

of responses will be into two groups, namely those that show this characteristic and those that don't, but on occasion it will be possible to distinguish those who actively avoid ethnocentrism by pointing out the relativity of values from those who either make no statement either way or who show evidence of an ethnocentric tendency. On other occasions, it may also be possible to subdivide this ethnocentric tendency into strong and not-so-strong categories. A characteristic of this kind deserves as fine a discrimination as possible. It also deserves persistent and diligent attempts to counteract it, and to replace it with as unbiased appraisals of human behavior as are possible to get from school children.

f) *Decentering.* This characteristic in children's responses is usually made up of a number of pieces of evidence of a capacity to talk and act like another person such that all aspects of another's behavior are effectively even though temporarily assumed. It has two aspects to it: one of identification with another's ways and empathy with his feelings, attitudes, and values; the other goes a step further to a point when a student is able to stand off from both the actor and the acted to think about both and to judge the effectiveness of the play and the players.

This characteristic will be evident in situations where the question is something like, "How do you think he felt when. . . ?" In the resulting generalization, there should be sufficient evidence of decentering ability to divide responses into the effective and noneffective and then to subdivide these further along the lines of the suggestions for *Ethnocentrism.*

Since titles to stories and charts are a form of a generalization, the above criteria may also be applied to them.

2. Examples

a) *Inclusiveness.* The student's generalization about the aspect of Bedouin life being studied that contains references to the *goatskin tents*, the *search for pasture* for animals, and the *seasonal nature* of Bedouin migration would be in a higher group than a sentence omitting one or more of these elements. If a teacher has decided ahead of this exercise that these elements are the key ones in the study to date, then the student who included them all must be in the top group. By noting the common (say, over a quarter of the class making them) omissions, some steps may be taken to draw students' attention to them by directive questions, e.g., "What *particular* thing did you notice about the time of year they moved?"

b) *Abstractness.* A third grader's response that includes two words, such as *worries* and *movement*, would qualify for the top group on this criterion;

a response which has only one abstract word, in it, like *search* or *difficult* (or, of course, *worries* or *movement*) would be in the next, while a third group could be made up of those responses that refer to *tents* and/or *April* and/or *goats*, *sheep*, and *camels*. Responses that are either inaccurate or irrelevant would qualify for the bottom group.

c) *Tentativeness.* It is usually possible to form only two groups, one of those responses that possess a clear indicator of this quality and another of those that do not exhibit it. Further examples [see (c) above for others] of such clear indicators are, "From what we read it seems that Tom Paine's *Common Sense* gained many supporters for the Revolution." "I suppose we could now say that . . ."

d) *Comparison.* "The early settlers at Jamestown are like the early Spanish explorers of California in that they found life very different from that which they had left" or "Compared with us, these people. . ." Each of these comparisons must be spontaneous to score and, of course, accurate. Generally there will be only two groups, made up of those who make comparisons and those who do not.

e) *Ethnocentrism.* "If these people had a government like ours, they would be much better off." "How silly of them to think that it would rain when they danced." "I'm sure they would be much happier if they had refrigerators, motor cars and TV like us."

Another form of ethnocentrism could be expressed by students responding to a question, "Is their way better or worse than ours?" by saying "Ours is best" without any explanation.

f) *Decentering.* "The Eskimo hunter was proud to have caught the seal because his family expects him to get them food." At a somewhat higher level of decentering would be the response that adds, ". . . and that's how people feel when they can do things people want them to do."

EVALUATION OF APPLICATION OF GENERALIZATIONS EXERCISES

Rationale and Examples

1. This task requires students to apply previously learned generalizations either to explain an unfamiliar situation or to infer the consequences of a particular action or event from known conditions. It usually occurs at the end of a sequence of learning activities at a point when students have acquired a sufficient repertoire of facts and generalizations to predict consequences from specified events.

Responses to the first question, "What would happen if. . . . ?," will be judged on criteria of *Inclusiveness* and *Abstractness* in the same way as for other generalizations (see p. 145). In addition there will be a criterion of *Explanations*. This involves an evaluation of any spontaneous explaining that follows a prediction. The best responses will be those that contain a fully detailed explanation based on a previously developed generalization. The worst will be those that contain the prediction without any explanation. Incorrect or fanciful predictions either will not be considered for evaluation on this criterion or will be placed in the lowest group.

The teacher may wish to request an explanation of an individual's prediction, in which case there will be further questions such as "Why do you say that?" or "What is it about the things we have studied so far that suggested to you that . . . would happen?" Or it may take the form of a request to a class for written explanations of a single plausible prediction, in which case the main criterion for responses will be that of *Inclusiveness*, which involves the extent to which a full (predetermined by the teacher) range of appropriate explanations is included.

An additional criterion which may be applied to the explanations given by older children in this generalization exercise is that of *Logical Coherence*. The best explanations according to this criterion will be not only inclusive but also so arranged as to present a convincing and integrated argument rather than being a simple list of points.

The same criteria may also be applied when children are asked to identify the conditions necessary to make the prediction plausible. It is a matter here of determining the sufficient causes for the occurrence of a particular prediction. For example, in the study of the Bedouin, students may be asked to predict the consequences of the abolition of camel herding and then to determine (either spontaneously or under questioning) whether the market is the only condition required to make herding camels profitable; whether a market is always necessary to a herding economy like that of the Bedouin; and whether what happens when the price of food for cattle rises will also happen to other herds such as camels.

2. Another approach to evaluating responses to Application of Generalizations questions is to classify responses according to one of six different categories. In this case, they can be classified as those that :

a) Make use of the *intended generalization* in the predictions. For example, for the sixth grade a prediction fitting this category might state that "Both the Portuguese and the local inhabitants would change their ways when they met." The basis for such a prediction is a

previously arrived at generalization about Spanish-Indian interaction in Central America.

b) Make use of a *different but appropriate generalization* as, for example, a sixth grade statement that "They (Portuguese or local people) would probably think they were strange."

c) Use *inappropriate generalizations*, such as "They (the Portuguese) would teach them the right way to live." Note that a response like this would also involve a degree of ethnocentrism deserving remedial action.

d) Use *highly specific even though accurate terms*, e.g., "They'd probably give them beads."

Or, in a similar vein,

e) Are based on a pupil's own experience and therefore only *marginally related* to the question, e.g., "When we moved to a new place, our furniture got damaged."

And finally (if necessary),

f) Show *little relationship* to the question and tend to reflect an inability to deal with it.

Over a period of time, remedial action resulting from the above analysis should lead to an increase of responses in categories (a) and (b).

Teachers must give thought to setting up marking procedures if their evaluation program is to be effective with this and other exercises, particularly with respect to the question of the particular form students' responses are to take if they are to be evaluated. Much of the evaluation will probably be of the oral responses given in a class discussion and will necessarily involve quick thinking to judge what the next step will be, since it must be based on on-the-spot interpretation of the several oral responses as well as of some of the nonverbal signals being made. This form of evaluation will continue to be common, but because of the high degree of subjectivity that can be involved, it should, wherever possible, be supplemented by other kinds of evaluation procedures. For this reason, teachers must in most cases decide in advance for which questions they will require written responses. There is a need generally for a greater incidence of evaluation of written responses because of the importance of objectivity in evaluation programs.

EVALUATION OF EXERCISES ON ATTITUDES, FEELINGS, AND VALUES

Most of the criteria that have already been discussed in relation to the above exercises apply here. For example, criteria of *Explanations* and *Logical*

Coherence would be used for responses to such questions as "What do you think were their reasons for saying what they did?" and criteria of *Inclusiveness*, *Abstraction*, and *Decentering* for responses to questions such as "What do these reasons tell you about what is important to them?" and "What differences do you see in what all these people think is important?" These questions are all part of the Analysis of Values strategy discussed in Chapter 5.

In the Interpersonal Problem Solving strategy (see Chapter 5) students are asked to indicate what line of action should be taken in an example of interpersonal conflict. Three broad criteria are suggested here together with sub-categories under each.

1. *Ethical concern* is a major criterion against which to measure responses. The following three categories are possible according to whether responses to the question of what should be done about the conflict show:

   a) *Concern for participants.* Students make an attempt to reconcile opposing viewpoints, e.g., "They should talk to each other about how they feel" or "They should talk their differences over with someone," and

   b) *Acceptance of rules*, where responses indicate that there are rules for solving problems like the one under discussion and that these are a suitable means of resolving the particular impasse involved; e.g., "He should say he's wrong" or "They should be nice to each other."

   c) *Solution by expedient.* In this case, the problem is resolved without any regard for ethical concerns, or it is resolved by referring it to "authorities," e.g., "They'll sort it out somehow" or "The teacher should tell them what to do."

As students gain in experience and objectivity in the social studies program it is possible that they will also begin to establish a few basic criteria against which they will judge human behavior. Such a list may contain such criteria as: respect for human dignity or an all-pervading altruism, and a concern to increase the happiness of people and to reduce their misery (though children would express such ideas differently). When this occurs it will be possible to add a higher category to the Ethical Concern criteria. Examples of student responses on this criterion would be: "People should be trying to help rather than hit each other," or "People should try to think about how others feel about what you are doing to them."

These same responses may also with advantage be analyzed on the

basis of an aspect of behavior similar to that already described under *Decentering* above. Here it has been described as:

2. *Sympathetic Response.* The following subdivisions are suggested:
   a) *Sympathetic.* Expresses concern for an understanding of person(s), e.g., "He was mean because he has always been told not to trust strangers"
   b) Neither punitive nor sympathetic.
   c) *Punitive* in the sense that an aggressive or semi-aggressive stance is taken, e.g., "The Spaniard is just mean" or "He should try to get his own back."

Some of these same written or oral responses may contain the suggestion that there may be several ways to handle the problem (the particular conflict the students have read or seen), thus recognizing the essential complexity of conflict situations. The broad criterion for these may be described as one of:

3. *Rationality.* This can be subdivided in terms of the number of solutions that are offered:
   a) More than two possible solutions and/or an indication of a willingness to consider more.
   b) Two alternative solutions offered without any elaboration.
   c) Only one solution given and with it no suggestion or awareness that there may be others of equal merit.

The younger the class and/or the less experienced they are in discussing and considering interpersonal conflicts, the more likely they are to give expedient, punitive, or unsympathetic, and one-solution-type reactions. As experience is gained, positive encouragement given to more objective, decentered, and rational responses, and sound examples provided by the teacher and others, changes can be expected. A careful record (refer to p. 141) of these changes can give greater precision to any remedial program that is aimed at countering nonrational, punitive, and expedient solutions to the interpersonal problems that children experience in social studies programs, and in their school experience in general.

EVALUATION OF EXERCISES IN SOCIAL AND ACADEMIC SKILLS

The three main skills for which the Taba Curriculum provides exercises are listed below.

1. *Map Skills.* The purpose is to see that students are able to use maps in a way that will improve their understanding of human behavior. Since it is not a purpose of this curriculum to merely develop superficial map skills, it is important that any measurement of facility in this area should be regarded as incomplete if it stops at the accuracy and attractiveness of the maps or if skill in map reading stops at the interpretation of physical features. The following criteria are recommended:

a) *Distance and direction.* These may be applied whenever students are asked to describe the location of a particular place. The responses may be classified into three or more groups. The students may also be asked to give details of the terrain and the climate, with responses similarly grouped. These questions should be accompanied by exercises requiring the use of maps to explain aspects of peoples' lives. The basic criterion here could be labeled:

b) *Living conditions*, which would be applied to the use of the data on a map to, for example, describe as accurately as possible living conditions in a particular place at two different times of the year. Groups could then be made of those responses accurately describing two or more aspects of living conditions, those describing at least one, and those failing to interpret the map as asked.

In the area of map *making*, pupils may be asked to draw a map of a trip taken, or to locate where family members go to work. The following criteria may be used:

a) *Size relationships.* The teacher should note the degree of appropriateness of size relations among various features, e.g., is the school unrealistically larger than the city hall? In other words, to what extent does subjective experience distort objective reality?

b) *Feature relationships.* To what extent do pupils use selected features in the landscape accurately to locate others? The use of two or more features to locate another will probably be close to the limit for most spontaneous responses to questions about where a place is, or to procedures for placing a particular feature in its correct location.

c) *Comparisons.* These may be applied to distances, terrain, and climate, but the basic aim and therefore the basic exercise for students should be to interpret differences in living conditions or ways of life among groups of people in relation to physical features and conditions.

d) *Flexibility.* This may be judged by the extent to which students see the need for corrections of various kinds and/or the extent to which they respond to suggestions for improving their maps.

2. *Mural-Making Skills.* The drawings made by individuals as part of a mural or for other purposes may be judged by criteria which apply to the relationships expressed in them as well as to their content. These are:

a) *Detail.* Drawings typically vary greatly in the amount of relevant content included in them. Applications of this criterion will be similar to that of *Inclusiveness* for written responses.

b) *Proportion.* This criterion applies to the size relationships among details and will be identical in its function to that applied to size relationships in the map-making exercises described above.

c) *Body completeness.* This criterion relates to a student's awareness of elements of the human body and has been associated by some psychologists with an understanding of people. This may be treated separately from the *Detail* criterion for younger students but incorporated with it for third-grade students and up.

d) *People emphasis.* Any persistent omission of people may indicate an orientation which is excessively focused on "things."

3. *Dramatic and Role-Playing Skills.* Dramatic activities offer opportunities for teachers to check how deeply students understand certain events and people in their study. They can be used both to promote and to evaluate these understandings. In evaluating such an activity the teacher may use a check list, with the names of the students in a column and the criteria across the top (refer to p. 141). A check against a student's name for each example of a behavior that fits a criterion will provide data of both individual and class performance. The criteria which have already been described in the context of generalizations and which apply here are: *Inclusiveness* and *Ethnocentrism.* To these may be added *Attitudes* and *Feelings,* which will be checked whenever they are accurately portrayed in gesture or by word. A low number of attitude and feeling check marks on any one occasion could indicate an overemphasis on *things* in a class's thinking about a culture or an aspect of it. *Errors* that remain uncorrected during class discussion of the presentation will point to the misconceptions that need to be corrected.

For those teachers with skill in the construction of multiple-choice and other forms of so-called "objective" tests, the purposes of an evaluation program may be better served, at least in terms of objectivity, by such a test format. However, any gains achieved in objectivity must be carefully matched against possible losses in validity as well as in backlash effects, such as a tendency for students who are tested with multiple-choice items to believe there are simple and direct answers to social studies questions. Some

investigators, in fact, decided that the multiple-choice format was less than adequate for measuring the kinds of skills they felt to be important in social studies.[5] In social studies it is often more important to solicit and measure the free responses to the probing, searching, needling questions typical of this area of the curriculum than it is to check on a student's ability to react appropriately to, for example, someone else's way of expressing a generalization. Since this is the case, it is possible that the evaluation suggestions offered in this chapter will rate high on validity at the risk of a lower objectivity rating. This discrepancy can be reduced if teachers are aware of the problem and are therefore able to reach a high level of objectivity and thus perform as well on a criterion of *Decentering* as it is hoped their class will by the end of a year's carefully planned teaching.

SUMMARY

In this chapter an attempt has been made to outline procedures that teachers will find useful for evaluating the responses that students make to the questions and requests that are a part of the normal learning activities in the Taba curriculum.

Exercises and marking procedures were suggested for the measurement of thinking, skills, attitudes, feelings and values, and academic skills. A key element in any evaluation program is the method of recording results. The one described here provides a simple yet effective method of evaluating student progress towards objectives. It should also provide a sound basis for any modifications teachers may need to make in their programs to accelerate student progress in specific ways.

---

[5] Donald W. Oliver and James P. Shaver, *Teaching Public Issues in the High School.* Boston: Houghton Mifflin, 1966.

MAIN AND ORGANIZING IDEAS FOR GRADES I THROUGH VIII

Appendix

GRADE 1

Unit I

Main Idea: The socialization of children takes place primarily within family, peer, educational, and religious institutions.

Organizing Idea: Children learn from their parents, friends, teachers, and clergy.

Unit II

Main Idea: Families differ in life style and role expectations.

Organizing Idea: Each family differs in the way it lives and the rules it makes for its members.

Unit III

Main Idea: The institutions of a society are economically sustained through a variety of means.

Organizing Idea: Families may be supported through such activities as fathers working, mothers working, . . .

GRADE 2

Unit I

Main Idea: Community needs are met by groups of people engaged in many related activities.

Organizing Idea: Some groups of workers make goods people need; others do work that is needed by other workers or by the people who live in the community.

Unit II

Main Idea: The nature of a particular community will influence the kinds of service it needs.

Organizing Idea: City, commuting, and farm communities each need some special services.

Unit III

Main Idea: The people of a community organize in different ways in order to attain their goals.

Organizing Idea: The people of a community get the goods and services they need through business, government, and volunteer groups.

GRADE 3

The Central Eskimo

Unit I

Main Idea: Differences in economies are associated with differences in the ways people use their environment and skills.

Organizing Idea: The Central Eskimo formerly met many of his needs through hunting. Today the Eskimo, like the people of our community, meets most of his needs through the exchange of goods and services.

Unit II

Main Idea: Contact between cultures often brings changes in the social institutions within them.

Organizing Idea: As a result of contact with outside cultures, some activities of the Central Eskimo that were formerly carried on through family and/or band are now carried on primarily by the government and church. The family still remains the central unit in his life.

The Desert Nomad

Unit III

Main Idea: Interaction between a people and their physical environment influences the way in which they meet their needs.

Organizing Idea: The desert people modify their behavior and their environment in order to make a living.

Unit IV

Main Idea: Tradition influences the ways in which a group of people modify their behavior.

Organizing Idea: The rules and customs of the desert nomad help him maintain his traditional life.

The Thai Villager

Unit V

Main Idea: The basic economy of a society has a major influence on the life style of its people.

Organizing Idea: The traditions and daily activities of the Thai farmer reflect the importance of rice in his society.

Unit VI

Main Idea: Tradition and innovation interact to determine the modifications that will occur in a people's way of life.

Organizing Idea: The Thai villager retains many meaningful beliefs and customs that are a part of his traditional way of life, yet he is aware of modern developments.

The Norwegian Fisherman-Farmer

Unit VII

Main Idea: Interaction between a people and their physical environment influences the way in which they meet their needs.

Organizing Idea: Many people of the west coast of Norway engage in a fishing-farming economy in order to meet their needs.

Unit VIII

Main Idea: People may develop new ways within their tradition to achieve their goals.

Organizing Idea: The people of the fishing-farming villages of the west coast of Norway have organized to meet many of their needs while still keeping many ways of their ancestors.

GRADE 4

Unit I

Main Idea: The cultures of different peoples influence the manner in which they use the same environment.

Organizing Idea: The different cultural backgrounds of a number of incoming groups affected their use of, and attitudes toward, the natural resources they found in the area to which they came.

Unit II

Main Idea: Man's way of living is affected by the physical and social environment in which he lives.

Organizing Idea: A wide range of human and natural resources in a state makes possible a variety of economic activities.

Unit III

Main Idea: As societies grow, both their requirements and their problems change.

Organizing Idea: Population growth has been a major factor in creating a number of human and environmental problems. These

problems have resulted in a variety of demands being made on government.

GRADE 5

Unit I

Main Idea: New discoveries result from the application of previously learned knowledge to the solution of current problems.

Organizing Idea: New knowledge and inventions encouraged world exploration during the fifteenth century.

Unit II

Main Idea: The life style of a culture is shaped by the contributions of groups which make up that culture.

Organizing Idea: The English made an effort to establish their life style in their colonies. Groups from other cultures adjusted to and affected the established culture in those colonies and in the expanding nation.

Unit III

Main Idea: Conflict may develop among groups when goals and expectations differ.

Organizing Idea: Differing views of the rights of colonists contributed to the break with Great Britain.

Unit IV

Main Idea: A mobile people tend to develop a way of life that differs from that in established communities.

Organizing Idea: As the people moved out from the eastern seaboard they modified their life style to the demands of frontier living.

Unit V

Main Idea: Technological development contributes to the nature and extent of cultural change.

Organizing Idea: Americans have changed the manner and means by which goods and services are produced and distributed.

Unit VI

Main Idea: The physical and cultural resources of an area encourage specialization in the use of land.

Organizing Idea: America's many different environments permit the development of many different resources.

GRADE 6

Unit I

Main Idea: Cultures change in varying degrees when they come in contact with another culture.

Organizing Idea: Aztec and Yoruba cultures influenced and were influenced by European conquistadores.

Unit II

Main Idea: Though all cultures possess certain unique features, they are also similar in a number of ways.

Organizing Idea: The countries of Middle and South America, though distinctive in many respects, possess many similarities.

Unit III

Main Idea: The human and natural resources and geographical features of an area influence the material prosperity of the people within that area.

Organizing Idea: The material prosperity of the people in Middle and South America is influenced by a variety of factors, including the availability of natural resources, worker "knowhow," and the peoples' values.

Unit IV

Main Idea: Different cultures deal with certain basic problems in a variety of ways.

Organizing Idea: Countries in Middle and South America have used a variety of methods in dealing with their problems.

Unit V

Main Idea: Changes that occur in one part of a society often produce changes in other parts of the society.

Organizing Idea: Technological changes in Middle and South America have brought about many changes in other aspects of the society.

GRADE 7

Unit I

Main Idea: Man's ways of living affect and are affected by the physical and social environment in which he lives.

Organizing Idea: Certain inventions of early man revolutionized his way of life.

Unit II

Main Idea: The actions of a people are influenced by the values they hold.

Organizing Idea: The daily activities of the ancient Greeks reflected their values.

Unit III

Main Idea: Ideas and societies change as they come in contact with the ideas and achievements of other societies.

Organizing Idea: Roman life and ideals changed as the Roman Empire expanded.

Unit IV

Main Idea: How quickly any change comes about depends not only on the nature of the change itself, but also on the pressures for and against that change.

Organizing Idea: The changes that occurred in Western Europe after the fall of Rome came about as a result of many interacting factors.

Unit V

Main Idea: The beliefs, activities, and values of people are influenced by the times in which they live.

Organizing Idea: The actions, ideas, and values of the great artists, writers, scientists, and religious figures of the Renaissance were shaped by the spirit of the times.

GRADE 8

Unit I

Main Idea: Institutions tend to undergo continuous change.

Organizing Idea: Throughout the colonial period the colonies were changing their ideas about religion, the kinds of laws they should have, the way to educate their children, and ways of using their resources.

Unit II

Main Idea: Political change results from dissatisfaction with the *status quo*: changes reflect attempts to deal with the causes of dissatisfactions.

Organizing Idea: Both the War for Independence and the forming of the Constitution were efforts of the people to solve the problems they were having under their form of government.

Unit III

Main Idea: Divergent ways of life tend to compete for available resources and political control.

Organizing Idea: Because the South was an agricultural society, its interests often differed from those of the industrial North. Many individuals in both the North and the South felt it was necessary, in order to support their way of life, to gain, or at least maintain, power.

Unit IV

Main Idea: As the nature of a society changes, new institutions arise to deal with those changes.

Organizing Idea: The change in the United States from a society of farms and small industry to a highly industrialized society resulted in a need for labor and government to assume new roles.

Unit V

Main Idea: Men continually seek to improve their condition through obtaining those rights they consider essential to their welfare.

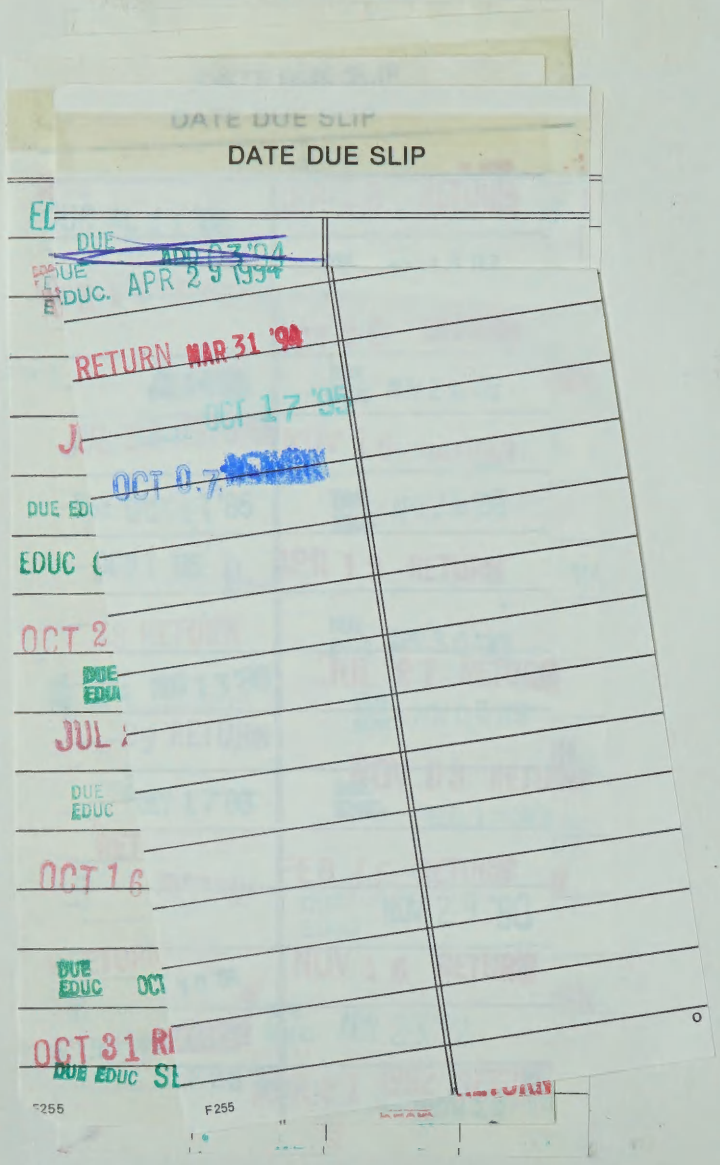
Organizing Idea: Groups within the American society have striven continually to promote their own well-being as they have defined it.

Unit VI

Main Idea: A nation affects and is affected by the other nations with which it interacts.

Organizing Idea: The role the United States has played in world affairs has been affected by its goals and the way it sees its role, as well as by the goals and roles of other nations.

Date Due


DATE DUE SLIP
DUE
APR 03 '94
DUE
EDUC. APR 2 9 1994
RETURN MAR 31 '94
OCT 17 '95
OCT 0 7
DUE EDU
EDUC (
OCT 2
DUE
EDU
JUL
DUE
EDUC
OCT 1 6
DUE
EDUC OCT
OCT 31 RI
DUE EDUC SL
F255
F255

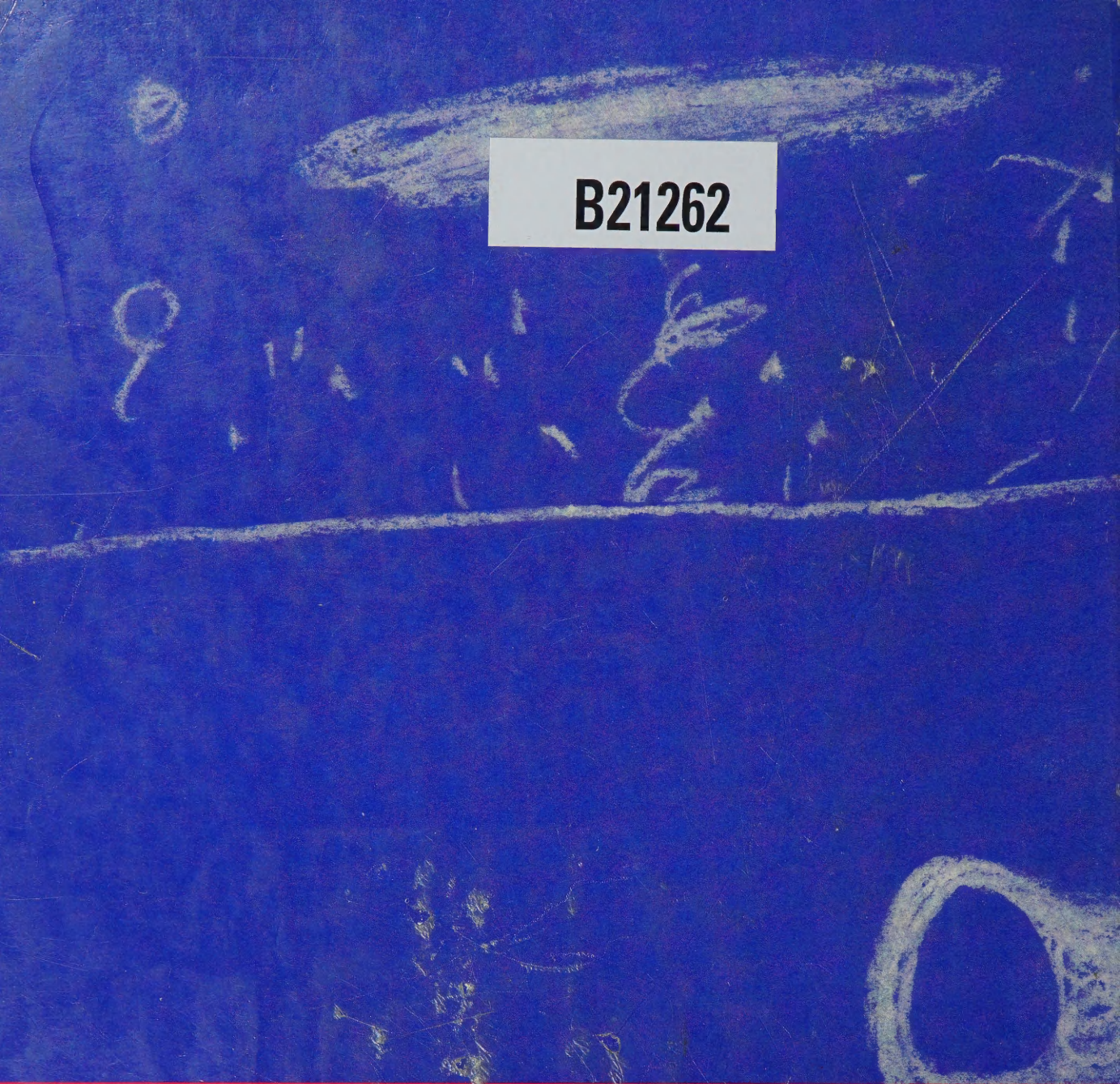
LB 1584 T113 1971 C-4
TABA HILDA 1902-1967
A TEACHER S HANDBOOK TO
ELEMENTARY SOCIAL STUDIES
39532750 EDUC

000010332757

RECOMMENDED FOR USE
IN ALBERTA SCHOOLS

LB
1584
T113
1971
C.4
Taba
R
CURRICULUM
CURRICULUM
EDUCATION LIBRARY

B21262



Drawing of an Eskimo igloo by John Moreton, age 10

ADDISON-WESLEY PUBLISHING COMPANY
Reading, Massachusetts · Menlo Park, California · London · Don Mills, Ontario